大学英语应用能力进阶系列教材

国际交流英语阅读进阶教程

Advanced English Reading for International Communication



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内 容 简 介

本教程共 20 个单元，分为基础篇、提高篇和实战篇，每单元 3 篇阅读材料，选择的阅读材料难度呈阶梯性，帮助学生逐步提高英语阅读能力。阅读材料的选择兼顾学术类雅思和培训类雅思，练习题的设计与雅思阅读考试衔接，并设计了词缀词根、近义词讲解与练习，帮助学生增加词汇量、提高词汇替换能力及语篇结构识别能力。

本教程专为学生完成大学英语基础课程后继续学习英语的需要而设计，学完此书后可达到备战雅思的水平。

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总　　序

高等教育改革发展在党的十八大之后，站在了新的历史起点上。就大学英语教学本身而言，我们当前面临的主要任务是如何把大学英语课程建设成大学生真心喜欢、终身受益的优质课程，以便更好地满足大学生接受高质量、多样化大学英语教学的需求，更加适应国家经济社会发展对人才培养的新要求。

近十年来，围绕着提高大学英语教学质量这一目标，海南大学的大学英语教学改革经历了四个阶段：

一、2004 年参与教育部启动的大学英语教学改革项目，成为全国 180 家试点院校之一，推行大学英语网络化教学试点；

二、2007 年成为全国 65 所教育部大学英语教学改革示范点单位之一，承担向周边院校推广辐射大学英语教学改革成果的重任；

三、2010 年，全面推行大学英语网络化教学，同年海南大学成为大学英语四、六级网考试点单位，大学英语教学改革全面普及；

四、2012 年海南大学启动基于课程改革的新一轮大学英语教学改革。此次改革以课程改革为出发点，改变以往大学英语只有一门课程的局面，通过拓展课程逐步形成新的大学英语课程体系，赋予大学英语新的内涵，以满足学生个性需要和社会需求。

此次出版的五本应用能力进阶系列教材便是我校多年大学英语教学改革的结晶之作。在出版的过程中，我们得到了学校教务处的大力支持，将该系列教材纳入学校中西部提升项目之本科教学质量与改革工程的子项目，予以全额资助，并多次组织专家对立项教材的选题、内容给予指导。同时，该系列教材也倾注了相关任课教师的心血，正是由于这些教师多年的坚持积累和无私付出，才有了这些成果。

在本系列教材即将付梓之际，敬请广大读者和专家斧正，以使之日臻完善。同时，谨向关心、支持本系列教材的所有相关人员表示衷心感谢！

是为序。

陈鸣芬

2014 年 6 月

前　　言

本教程是海南大学“中西部提升项目——本科教学质量与改革工程项目”的成果之一，专为学生完成大学英语基础课程后继续学习英语的需要而设计，选择的阅读材料难度呈阶梯性，帮助学生逐步提高英语阅读能力，达到备战雅思的水平。

本教程由多年从事大学英语教学及雅思培训的教师联合编写，意在将大学英语教材与雅思类培训教材融合起来，既可作为大学英语选修课程教材使用，也可作为雅思培训教材选用。

全书结构

本教程由三部分组成，基础篇、提高篇和实战篇，共 20 个单元，每单元 3 篇阅读材料。

基础篇包括 1~5 单元，每篇阅读材料的长度约 600 词左右。每单元有 1 篇学术类阅读材料，2 篇培训类阅读材料，篇章难度与词汇量要求略高于《大学英语课程教学要求》中规定的一般要求；练习题的设计与雅思阅读考试衔接。基础篇的 5 个单元以阅读技巧为脉络，并设计了词缀、近义词讲解与练习，与大学英语衔接。

提高篇和实战篇均为学术类阅读材料。提高篇从第 6~15 单元，旨在逐步提升学生英语阅读水平。文章长度从 700 词左右逐步增加到 1000 词左右，学生在熟悉各类题型过程中增加词汇量、提高词义替换能力及语篇结构识别能力。提高篇以雅思考试题型为线索组织各单元，每单元针对一类题型细致研究，挖掘出题思想及答题技巧，兼顾其他题型的练习与巩固。单词练习中设计词根讲解与练习。

第 16~20 单元为实战篇，旨在检验学生的学习效果。每篇阅读材料长度均在 1000 词以上，学生综合运用所获知识与能力回答阅读理解题目。

教学中，建议每单元的 Passage 1 作为课堂主讲篇章，用于精学精练，夯实语言基础，增强实力，提高考试技能；Passage 1 后提供 Text Analysis，帮助学生从宏观上理解文章的结构。Passage 2 和 Passage 3 用于学生的课外学习。

阅读材料选择及题型设计

本教程阅读材料的选择兼顾学术类雅思和培训类雅思，以前者为主。

本教程选择的学术类雅思阅读文章题材和涉及内容共有以下四个大类：自然科学类、人文历史类、技术进步类及心理和教育类。这四类文章的难度依次递增，其所占比例都基本符合雅思考试的实际情况。

阅读材料主要来自 *New Scientist*、*The Economist*、*American Scientist*、*Scientific American*、*National Geographic*、*Nature*、*Discover*、*Time (Europe)*、*Boston Global*、*History Today* 等雅思学术类阅读材料主要来源的期刊和学术出版物，其写作方式多样，包括记叙文、说明文及议论文等多种文体，内容包含想要参加雅思考试的考生所感兴趣的、

与其认知程度相符的常见话题。阅读材料中还包括了非文字性的内容，比如图表、曲线图等。

本教程为学术类雅思阅读主要设计了以下 8 类有较高信度的题型，按照其出现频率及重要性为依次递减的顺序分别为：段落配对题，配对题，判断正误题，摘要题，选择题，段落大意题，简答题和图形题。

本教程中的培训类阅读材料为实用性强的功能性短文，如通知、时间表、住宿安排、广告、大学课程介绍、图书馆指引、规定，以及其他的类似内容，非常贴近西方的实际生活。材料改编自原版英文报刊和书籍，如 *Time*、*Reader's Digest* 等。所涉及题型与学术类阅读材料的题型基本一致。

◉ 语言能力培养

本教程注重夯实学生的英语语言基础，从词、句、篇等不同层面培养语言能力，而不是单纯依靠技巧的探究。首先，本教材词汇量达 8000 词以上，并且设计了词缀与词根的讲解及练习，帮助学生迅速扩大词汇量。近义词辨析提供近义词的细微差别，并为提高同义替换能力打下基础。同义替换是词汇量及表达能力的检测指标之一，能够识别同义替换，学生才能识别文章与题目语句间的对应关系，进而做出判断、比较、分析。其次，通过翻译关键句来提高对原文的理解。本教程从每篇阅读材料中选出若干关键句和长句来设计英译汉练习，旨在让学生完全读懂原文，通过识别微妙含义来区别推测与事实、主观论断与客观描述、他人观点与作者观点，加深对阅读材料的理解。第三，培养篇章层次上对全文的把握能力，通过 Text Analysis 介绍文章的写作目的，分析文章展开方式，使学生可掌握学术文章写作展开的主要方法和规律特点，从而在宏观上把握全文。

◉ 编者团队

本教程由海南大学外国语学院教学经验丰富的教师团队合作完成。教程的总体设计、修改、定稿由主编及副主编完成。每位成员负责各自的编写任务并交叉审阅其他单元内容。

本教程邀请海南大学外国语学院院长陈鸣芬教授主审，提出了宝贵的修改意见及建议，在此表示衷心感谢。

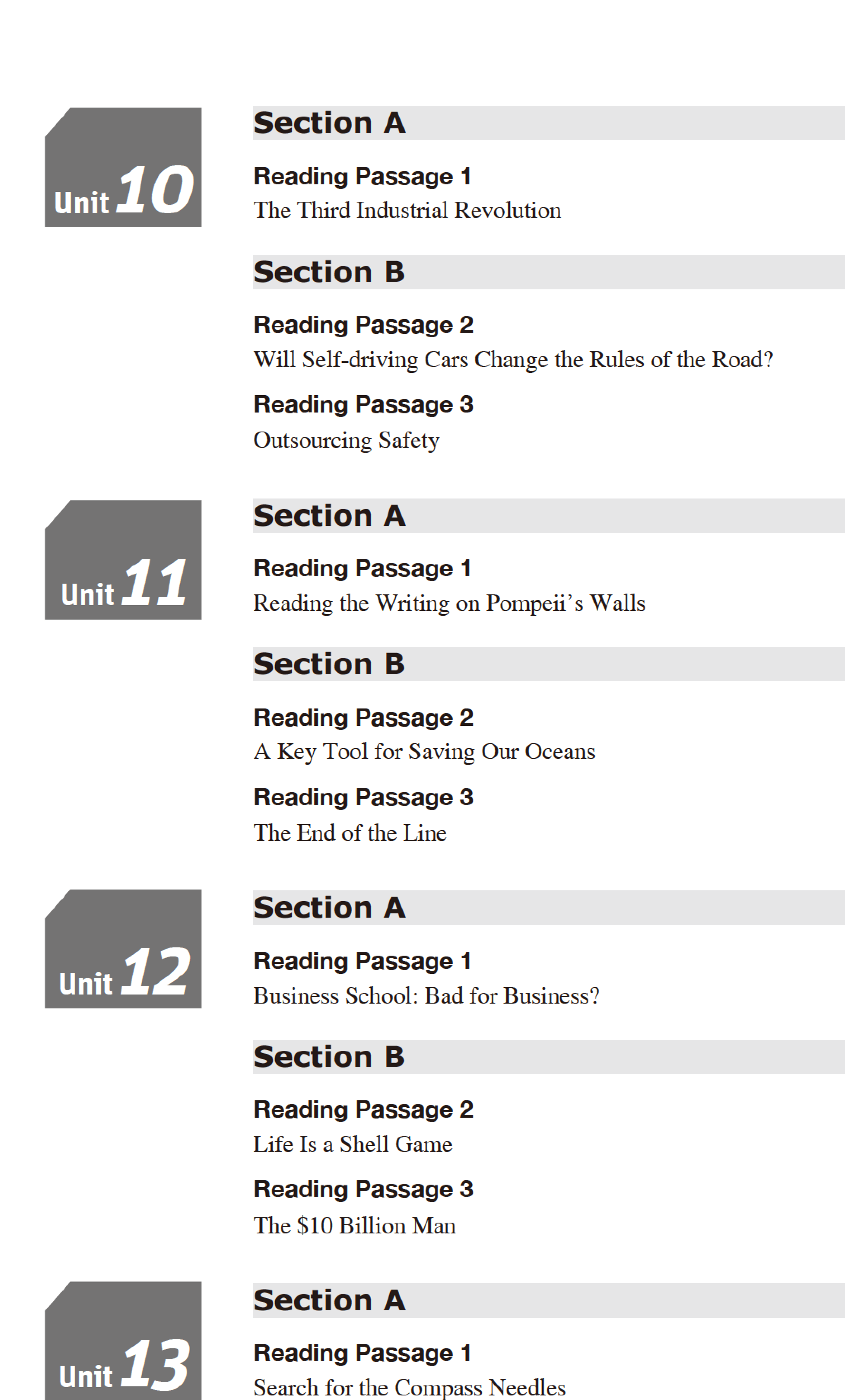
由于时间仓促，编者水平有限，书中难免有疏漏和不足之处，恳请广大读者和同行提出宝贵意见，以便日后对本教程做出修订，使之更加完善。

《国际交流英语阅读进阶教程》编写组

2014 年 6 月

Contents

基　础　篇



Unit 1

Section A

Reading Passage 1

UNESCO Director General's Statement on Climate Change and World Heritage

One of the major challenges of our society is coping with climate change; to this end the need to improve the level of public debate on climate change is vital. Thus, public discussions should be well-informed and realistic. The constituencies made up of research institutes, higher education institutions, international organizations, governments and civil society have responsibilities to ensure that democratic debate is based on cogent argumentation and reliable evidence as much as possible.

The 1972 UNESCO World Heritage Convention is a central tool in helping identify and protect, for the benefit of current and future generations, the tremendous natural and cultural heritage of the world. The Convention is designed to encourage international cooperation for the conservation of protected areas and to monitor their state of conservation.

Climate changes are impacting on all aspects of the human and natural systems, including both cultural and natural World Heritage properties. Protecting and ensuring the sustainable management of these sites has therefore become an intergovernmental priority of the highest order.

Many marine World Heritage sites are tropical coral reefs whose exposure to bleaching events—due to increased ocean temperature and acidification is increasing—possibly leading to mass extinction of coral reefs. The increase of atmospheric temperature is also leading to the melting of glaciers worldwide. Terrestrial biodiversity may also be affected by species shifting ranges, changes in the timing of biological cycles, migration of pests and invasive species, among other phenomena.

World Heritage cultural sites are also exposed to this threat. Ancient buildings

were designed for specific local climates. Increasing sea level threatens numerous coastal sites. The migration of pests can also have an adverse impact on the conservation of built heritage. But aside from these principal physical threats, climate change will also have tremendous impact on social and cultural aspects, with communities changing the way they live, work, worship and socialize in buildings, sites and landscapes, possibly leading to migration and the abandonment of their built heritage altogether.

The fact that climate change poses a threat to the outstanding universal values of World Heritage sites has several implications for the implementation and monitoring of the 1972 World Heritage Convention. Lessons learnt at several sites worldwide show the relevance of designing and implementing appropriate adaptations measures. Research at all levels would also have to be promoted in collaboration with the various bodies involved in Climate Change work, especially for cultural heritage where the level of involvement of the scientific community should be reinforced. The global network of the World Heritage sites is ideally suited to build public and political support through improved information dissemination and effective communication on the subject, given the high profile nature of these sites.

Similarly, the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, which underlining the deep-seated interdependence between the preservation of the world's tangible and intangible heritage, pays close attention to knowledge and practices concerning nature and the universe. UNESCO's Man and the Biosphere (MAB) Program and the Local and Indigenous Knowledge System (LINKS) Project likewise focus on the interrelationship between cultural and biological diversity, and the need for a fully integrated approach to issues of environmental preservation and sustainable development.

UNESCO is committed to working closely with various actors in civil society, including the scientific community, to address the multiple challenges posed by climate change, in particular to the precious and fragile cultural and natural heritage of the world.

(Adapted from http://whc.unesco.org/en/activities/396, anonymous)

Notes

- **UNESCO (the United Nations Educational, Scientific and Cultural Organization)** 联合国教育、科学及文化组织
- **the World Heritage Site** 世界遗产，分为自然遗产、文化遗产和复合遗产三大类，是一

项由联合国支持、联合国教育、科学及文化组织负责执行的国际公约建制，目的是保存对全世界人类都具有杰出普遍性价值的自然或文化处所。

- **World Heritages Convention**《世界遗产公约》。1972 年 11 月 16 日，联合国教育、科学及文化组织在法国巴黎第 17 届会议上通过了《世界遗产公约》，旨在保护因年久失修或其他经济或政治原因而遭到破坏甚至毁坏的文化遗产和自然遗产。
- **Framework Convention on Climate Change (UNFCCC or FCCC)**《联合国气候变化框架公约》。联合国于 1992 年 5 月通过了此公约，并于同年 6 月在巴西里约热内卢召开的由世界各国政府首脑参加的联合国环境与发展会议期间开放签署。
- **Kenya** 肯尼亚
- **Nairobi** 内罗毕（肯尼亚的首都）

New Words

cogent ['kəʊdʒənt]
adj. strongly and clearly expressed in a way that influences what people believe（理由、论据）有说服力的，令人信服的

constituency [kən'stɪtʃu:ənsi:]
n. a district that elects its own representative to parliament（选举国会议员的）选区

coral ['kɒrəl]
n. a hard substance formed from coral 珊瑚

reef [ri:f]
n. a long line of rock or coral, in the sea, with its top just below or just above the surface 礁，暗礁

bleach [bli:tʃ]
vt. to remove the color from sth. with a chemical or through the action of sunlight 漂白

acidification [əˌsɪdɪfɪ'keɪʃən]
n. the process of becoming acid or being converted into an acid 酸化，呈酸性

glacier ['glæsjə]
n. a large mass of ice, formed by snow on mountains, that moves very slowly down a valley 冰河，冰川

biodiversity [ˌbaɪəʊdaɪ'vɜ:sətɪ]
n. the diversity of plant and animal life in a particular habit (or in the world as a whole) 生物多类状态，生物多样性

dissemination [dɪˌsemɪ'neɪʃən]
n. making something. such as information or knowledge available to a lot of people 散播，宣传，浸染

indigenous [ɪn'dɪdʒənəs]
adj. originating where it is found 土生土长的，本地的

Phrases and Expressions

cope with	对付，处理
for the benefit of	为……的利益，为惩戒……
impact on	冲击，碰撞，影响
in particular (to…)	尤其，特别

Text Analysis

The passage is a speech delivered by the Director General at the Press Conference of the 12th Conference of parties to the UN Framework Convention on Climate Change.

The passage focuses on the topic that climate change is one of the major challenges that we have to face and deal with. The whole passage can be roughly divided into five parts.

The first part is Paragraph 1. The speech states the importance of the improvement of public debate on climate change. Therefore, the debate should be based on the cogent argumentation and reliable evidence.

The second part is only Paragraph 2. This is a transitional paragraph. We are informed of background information on the 1972 UNESCO World Heritage Convention, which naturally leads readers to its responsibility for natural and cultural heritage of the world.

The third part consists of three paragraphs, Paragraph 3 to Paragraph 5. This part deals with the negative effects that climate changes have on both natural and cultural heritage of the world. Paragraph 3 presents the impact and calls for governments in the world to give top priorities to the challenge. Then the speaker employs details to prove the negative effects in Paragraph 4 and Paragraph 5. Paragraph 4 states the details on the negative effects on natural heritage and Paragraph 5 centers on the negative effects on cultural heritage.

The fourth part is made up of Paragraph 6 and Paragraph 7. This part first states the threat from climate changes has several implications for the implementation and monitoring of the 1972 World Heritage Convention. The speaker explains the implications from several aspects, for example, lessons prove measures are appropriate in Paragraph 6. Similarly, other two organizations focus their attention to different fields on the protection of natural and cultural heritage of the world.

The fifth part is the last paragraph. The speaker ends his speech by stressing the responsibilities for the challenge of climate change.

Prefixes and Suffixes

prefix: demo-

表示“人民”

同缀词：

demographic	*adj.*	人口统计的，人口的
democrat	*n.*	民主主义者
democratize	*v.*	民主化，使民主化
democracy	*n.*	民主

根据词缀猜下列词的词义：

1. demobilize	*v.*	________
2. democratic	*adj.*	________
3. demography	*n.*	________

prefix: out-

(1) 表示“出去，过时，外面”

(2) 表示“超过，过度”

同缀词：

outward	*adj.& adv.*	向外（的），外面（的）
outlet	*n.*	出口，出路
outlive	*v.*	活得比……长

根据词缀猜下列词的词义：

4. outlandish	*adj.*	________
5. outside	*adv.*	________
6. outnumber	*v.*	________
7. outburst	*n.*	________
8. outclass	*v.*	________
9. outcase	*n.& adj.*	________

suffix: -age

(1) 表示“状态，总称”

(2) 表示“费用”

(3) 表示“场所，物品”

同缀词：

village	*n.*	村，村庄
pillage	*n.&v.*	抢劫，掠夺
envisage	*v.*	想象，设想，正视

根据词缀猜下列词的词义：

10. heritage	*n.*	____________
11. drainage	*n.*	____________
12. pilgrimage	*n.*	____________
13. tonnage	*n.*	____________
14. coverage	*n.*	____________
15. wastage	*n.*	____________
16. shrinkage	*n.*	____________

Synonyms

agreement, contract, treaty, convention, bargain, understanding, accord
这些名词均有“协定，协议，契约，合同”之意。

agreement：普通用词，泛指个人、团体或国家之间取得一致而达成的任何协议，协定或合同、契约等，可以是口头的，也可以是书面的。

contract：侧重指双方或多方订立的具有法律效力的正式的书面合同或契约。

treaty：指国家之间经外交谈判后依照国际法签订的正式书面条约。

convention：比 treaty 更专门化，但不及 treaty 正式。也可指国家之间就有关事情签订的条约。

bargain：通常指商业交往中的合同。

understanding：指不具约束力的非正式的协议。

accord：多指国际上的非正式协议。

Complete the following sentences with the proper form of the words listed above.

17. The firm has won a $5 million ____________ to build ships for the navy.

18. It is difficult for him to persuade parliament to approve the ____________ on arms reduction.

19. The government's actions may violate the European ____________ on Human Rights.

20. There is wide ____________ that the forest damage is the result of atmosphere pollution.

21. It was impossible to strike a ___________ that both sides would accept.

22. Bad working conditions are not in ___________ with international standards.

23. We have a(n) ___________ with them that we won't compete directly.

habit, custom, convention, tradition 这些名词均有"习惯，风俗，传统"之意。	**habit**：侧重指自然养成的，不易去掉的个人习惯。 **custom**：指一个国家、民族、地区或社会的习惯、行为方式或风俗习惯。 **convention**：多指约定俗成的行为方式规则或公认的标准，或指艺术上公认的技巧。 **tradition**：广义指世代相传的伦理、行为规范或生活方式，特指因长久奉行而几乎具有法律效力的习惯。

Complete the following sentences with the proper form of the words listed above.

24. Some westerners have the ___________ of kissing on the forehead when gathering.

25. Parents bring up their children in accordance with their own ___________.

26. Her later novels abandon the narrative ___________ of the 19th-century fiction.

27. There were in the ___________ of going for long walks.

Exercises

Questions 1—3

*Choose the correct letter **A, B, C** or **D**. Write the correct letter in blanks **1–3**.*

1. According to the passage, what are the democratic discussions based on?
   - A Information and reality.
   - B Argumentation and research.
   - C Cooperation and lessons.
   - D Argumentation and evidence.

2. What's the responsibility of the 1972 Convention?
   - A To identify and protect the conservation of different protected areas.
   - B To inform the protected areas of their responsibility and monitor their state of conservation.
   - C To encourage international cooperation and monitor the state of conservation among the heritage in the world.
   - D To ensure and monitor the sustainable management for conservation of the protected areas.

3. According to the passage, what will be influenced due to the migration of pests?
   A Terrestrial biodiversity and the conservation of built heritage.
   B Cultural world heritage properties.
   C Tropical coral reefs and the conservation of built heritage.
   D Natural world heritage properties.

1. ____________ 2. ____________ 3. ____________

Questions 4—7

Complete the sentences below. Choose ***NO MORE THAN THREE WORDS AND/OR A NUMBER*** *from the passage for each answer.*

4. For the sake of current and future generations, the 1972 UNESCO World Heritage Convention aims at helping identify and protect both natural and cultural ____________ in the world.

5. Many tropical marine reefs that are exposed to bleaching events are in danger of ____________ since ocean temperature and acidification becomes increasingly severe.

6. A large number of social and cultural World Heritage properties will also be influenced by climate change, which possibly results in migration and the____________ of their built heritage altogether.

7. More attention is paid to ____________ on nature and the universe by the Safeguarding of Intangible Cultural Heritage.

Questions 8—11

Translate the sentences from the passage into Chinese.

8. Climate changes are impacting on all aspects of the human and natural systems, including both cultural and natural World Heritage properties.

____

____

9. The fact that climate change poses a threat to the outstanding universal values of World Heritage sites has several implications for the implementation and monitoring of the 1972 World Heritage Convention.

____

____

10. UNESCO's Man and the Biosphere (MAB) Program and the Local and Indigenous Knowledge System (LINKS) Project likewise focus on the interrelationship between

cultural and biological diversity, and the need for a fully integrated approach to issues of environmental preservation and sustainable development.

____

____

11. UNESCO is committed to working closely with various actors in civil society, including the scientific community, to address the multiple challenges posed by climate change, in particular to the precious and fragile cultural and natural heritage of the world.

____

____

Section B

Reading Skills

Reading for the Key Ideas in Sentences

Although a sentence may give a great deal of information, it usually offers one key idea. Readers must be able to find the key ideas in order to understand sentence meanings clearly.

Here is how to find the key ideas in sentences:

1. Ask *who* or *what* the sentence is about.
2. Ask *what* the person is doing or *what* is happening to the person or object.
3. Learn to separate minor details from the main idea. Many words in a sentence describe things about the subject of the sentence and merely add details to it. If you ask *when*, *where*, *how*, or *why*, you will find details and it will be easier to see the key idea.

Here is one example:

> *Nights are long in hospitals, but all through the night the young marine sat there in the dimly lit ward, holding the old man's hand and offering words of hope and strength.*

Key idea: The young marine sat by the old man the whole night.

We see that the key idea of this sentence is "the young marine sat by the old man the whole night", as this tells us about who did. All the information is about when and *in what way* the marine sat.

Of course, it is not always easy to decide which details give the key idea and which add to the key idea. However, the starting point for determining the key idea in a sentence is to find who or what the sentence is about and what the person or object is doing.

Reading Passage 2

CareerHub—An Initiative by NTU's Career & Attachment Office

Subject Selection Dilemma

Students are always faced with the perpetual dilemma of subject selection. On top of having to manage their schedules with different classes, students might worry about how their choices during subject planning could affect them from a career development point of view. After all, the ultimate goal of getting that degree was that—to get a good job.

Questions like "How will this affect my career options?", "Will I like this line of work?" or "Is this going to be relevant or helpful to my future?" are questions that may come to mind.

This problem is especially perplexing to freshmen, new to university life, new to a whole different system with greater bearing on their futures.

Without proper guidance or consideration, uninformed decisions may result in unhappiness not only during their time in university, but also in their future prospects.

World of work

Three out of four freshmen will express some uncertainty in their subject combination for good reason too. After all, with the working world looming at the end of their academic life, it is only normal to want to make the best out of it.

However, freshmen need not feel alone in facing this predicament. CareerHub—an initiative by NTU's Career & Attachment Office (CAO)—has come up with several tips to share with students on some factors they may wish to consider when selecting their subjects and how these choices may affect their career decisions.

Success in planning

CareerHub's vision of empowering NTU students with the ability to manage their own careers is in line with the career management and planning services

provided through CareerHub.

As such, CareerHub invites students to take up its services ranging from career coaching to helping students discover their options to career assessment tools adopted for students to assess their skills and interests and compatibility with various jobs.

In doing so, students can be more focused not only in organizing their coursework and subject selection, but also in working towards their ideal jobs.

CareerHub reiterates that it is never too early to start career planning as it takes time to develop the necessary skills for the job, which is easier with proper subject selection.

Know yourself

In order for students to plan their coursework effectively, they must first understand their own abilities. CareerHub suggests that students do this by mapping out their skills and interests either on their own or through the free tool for freshmen called Slamdunk.

It helps for students to think about what they want to do, where they want to work, what type of organization they want to work in and what level of skills do they envision for themselves five years from now.

For more help, students are welcome to visit CareerHub during office time.

(Adapted from http://www.ntu.edu.sg/CAO/Students_Careerhub/Pages/default.aspx, anonymous)

Notes

- **NTU** (Nanyang Technological University) 新加坡南洋理工大学，是新加坡最大的公立大学之一，也是新加坡校园面积最大的高等学府。其中 2010 年位于玉兰园的校园成功举办了世界青年奥林匹克运动会。

New Words

perpetual [pə'petʃuəl]
adj. continual; happening often; frequently repeated 不断的，反复的

perplex [pə'pleks]
vt. to make people feel puzzled or confused 使迷惑，使混乱

uninformed [ˌʌnɪn'fɔːmd]
adj. be short of knowledge or information 信息不足的，情况不明的

loom [luːm]
vi. to come into sight without a clear shape 隐约出现

predicament [prɪ'dɪkəmənt]
n. a difficult or unpleasant situation in which sb. is uncertain what to do 困境，窘况

compatibility [kəm.pætə'bɪlətɪ]
n. capability of existing or performing in harmonious or congenial combination 适合，通用性，和睦相处

reiterate [rɪ'ɪtəreɪt]
vt. to say, state, or perform again 重申，反复地做

envision [ɪn'vɪʒn]
vt. to picture in mind as a future possibility; imagine 想象，预见，展望

Phrases and Expressions

come to mind	想起来了
be in line with	符合
map out	筹划（安排），详细提出
on one's own	靠自己的力量，独自地

Exercises

Questions 12—16

Complete the sentences below. Choose ***NO MORE THAN FOUR WORDS*** *from the passage for each answer.*

12. Students, especially freshmen, might be concerned about how ___________ affect them from the viewpoint of career development when planning subject.

13. Ignorant decisions might lead to___________ if there were no proper consideration.

14. CareerHub would like to share___________ with students on some factors when selecting their subjects.

15. Students are invited to engage in CareerHub's services, varying from___________ to helping students discover their options to career assessment tools.

16. In order to understand themselves, students are advised to list ___________ either on their own or through Slamdunk.

Questions 17—25

Complete the summary below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

Students, especially freshmen, usually have to face the permanent 17 ___________ when selecting subject since they are worried that their choice might have a negative effect on their future career 18 ___________. Now they are not 19___________ since CareerHub, an 20 ___________, has taken by CAO. CareerHub provides 21 ___________ and 22 ___________ for students, which aims in helping them acquire the ability to manage their own 23 ___________. In order for students to make effective plans on their coursework, CareerHub suggests that students know their 24 ___________ through their own skills and interests either by themselves or with the help of 25 ___________.

Questions 26—30

Translate the sentences from the passage into Chinese.

26. This problem is especially perplexing to freshmen, new to university life, new to a whole different system with greater bearing on their futures.

____

____

27. After all, with the working world looming at the end of their academic life, it is only normal to want to make the best out of it.

____

____

28. CareerHub's vision of empowering NTU students with the ability to manage their own careers is in line with the career management and planning services provided through CareerHub.

____

____

29. CareerHub reiterates that it is never too early to start career planning as it takes time to develop the necessary skills for the job, which is easier with proper subject selection.

____

____

30. It helps for students to think about what they want to do, where they want to work, what type of organization they want to work in and what level of skills do they envision for

themselves five years from now.

____

____

Reading Passage 3

Don’t Let Mold Move In

Mold and mildew never stop looking for ways to sneak into your home and spread out. So take a moment to learn about mold’s effect on you and how to evict these unwanted guests before they settle in!

Do I have mold in my home?

Nearly 100 percent of American homes contain mold. Look for discolored patches, such as black streaks in grout or a red stain on your shower curtain. Mold also thrives in less visible places like windowsills and refrigerator seals. A musty odor is a good indicator that there’s mold hanging around that you can’t see.

Is mold bad for my health?

While low levels of mold will generally have little effect on you, exposure to indoor mold can aggravate asthma and trigger allergies. More extreme infestations can contribute to a range of respiratory conditions. And remember, just because you can’t see mold doesn’t mean it isn’t there.

How do I permanently kill mold?

Soap and detergents can remove mold stains but do not actually kill or prevent mold. Regular cleaning with a bleach-based product like Tilex® mold & Mildew Remove instantly and effectively kills mold as well as mildew, letting you breathe a little easier.

(Adapted from *Reader’s Digest (US Edition)*, June 2012, anonymous)

Exercises

Questions 31—36

Do the following statements agree with the information given in the passage?
*In brackets **31—36**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

31. (　　) Mold and Mildew can be easily found everywhere.
32. (　　) Mold sneaks into windowsills and refrigerator seals.
33. (　　) Generally speaking, mold has little effect on people.
34. (　　) If mold can't be seen, it means it isn't there.
35. (　　) Soap and detergents can remove and prevent mold.
36. (　　) Regular cleaning can clean up mold from your house.

Unit 2

Section A

Reading Passage 1

For Some Species, Plastic Is Fantastic

Garbage in the North Pacific may help some species proliferate at the expense of others.

Plastic's durability helped to make it a popular miracle material in the early 20th century. Its omnipresence, however, may now be disrupting ecosystems in some surprising ways. A new study by researchers at the Scripps Institution of Oceanography in La Jolla, California shows that the concentration of plastic has increased by 100 times over the past 40 years in the North Pacific Subtropical Gyre—an enormous calm spot in the middle of a clockwise rotation of ocean currents that falls between East Asia and the West Coast of the U.S., with Hawaii as its approximate midpoint. The size of the area is estimated to be more than 18 million square kilometers.

The study, published online on May 9 in *Biology Letters*, also documented for the first time a rise in egg densities of Halobates sericeus, a water strider that lays its eggs on floating objects. The team collected and analyzed data on bits of plastic less than five millimeters across in the North Pacific Ocean, including records from two recent voyages, published data from other sources and data developed from archived samples in the Scripps collection taken in the early 1970s. Author Miriam Goldstein, who is a biological oceanography Ph.D. candidate at the Scripps, notes that a 2011 study that examined the North Atlantic Subtropical Gyre found no increase in plastic since 1986.

Higher concentrations of floating plastic debris offer more opportunities for the pelagic strider to lay eggs. This marine insect—closely related to pond striders—spends its entire life out on the open ocean and takes its place in the food web by consuming zooplankton and larval fish and being eaten by crabs, fish and seabirds.

Floating objects are historically rare in the North Pacific. "Striders would have

been lucky to find a feather or a bit of floating wood," Goldstein says. Now floating plastic pieces are more common and offer a surface on which striders can lay their bright yellow, rice grain-size eggs.

Although researchers found an increase in eggs, they did not find an increase in the insects themselves. That could be because there were not enough samples from the early 1970s with which to adequately compare them, but equally likely crabs or small surface-feeding fish may be eating the eggs, Goldstein notes.

Researchers are concerned that this proliferation of plastic may be giving striders, microbes, animals and plants that grow directly on the plastic an advantage over oceanic animals that are not associated with hard surfaces, such as fish, squid, tiny crustaceans and jellyfish. "While these organisms [that grow directly on the plastic] are native, they're kind of like weeds," Goldstein explains, "in that they grow, reproduce and die quickly." In contrast, the organisms in the water column tend to be more bio-diverse. More than half of the ocean is part of the subtropical gyres, and changing the way that these gyres function by adding lots of plastic trash could have unpredictable consequences. "While our study only looks at one little insect in one area of the ocean, it shows that tiny pieces of plastic do have the potential to alter the ecology of the open sea," she says.

(Adapted from *Scientific American*, August 2012, written by Carrie Madren)

Notes

- **The Scripps Institution of Oceanography** 斯克里普斯海洋研究所，1903 年成立于加利福利亚州拉霍亚，是全球致力于海洋与地球科学研究、公共服务、本科教育以及研究生教育于一体的最古老最大的研究所之一。
- ***Biology Letters***《生物学报》是英国皇家学会期刊，最初为季刊，自 2007 年改为双月刊。目前首席主编是布赖恩 · 查尔斯沃思（Brian Charlesworth）。

New Words

proliferate [prə'lɪfəreɪt]
vt. to increase in number very quickly 使激增，使扩散

omnipresence ['ɒmnɪ'prezəns]
n. the state of being everywhere 无所不在

debris [də'bri:]
n. pieces of wood, metal, brick, etc. that are left after sth. has been destroyed 碎片，残骸，残渣

pelagic [pə'lædʒɪk]
adj. relating to the parts of the sea that are far from the land 远洋的，海面的

zooplankton [ˌzəʊə'plæŋktən]
n. animal constituent of plankton 浮游动物

larval ['lɑːvl]
adj. concerning a young insect with a soft tube-shaped body 幼虫的，幼虫状态的

Text Analysis

This passage is an expository for the point that garbage's proliferation may now be altering the ecosystem of the open ocean. It is a problem-supporting specific details pattern and can be roughly divided into three parts.

The first part is Paragraph 1. The author presents the problem in the beginning. The first two sentences state the problem that garbage may promote the rapid increase of some species, which may be disrupting ecosystem. Then we can find the study that is employed to prove that plastic has been increased rapidly over the past 40 years.

The second part is made up of four paragraphs from Paragraph 2 to Paragraph 5. This part deals with the supporting details that plastic offer more opportunities for the birth-giving of marine striders. In Paragraph 2, the writer employs a study to state the-first-time rise in egg densities of a water stride. In Paragraph 3, the writer first briefly introduces the living surrounding and habits of these marine insects. In Paragraph 4 the writer quotes what Goldstein said to compared the living condition in the past with that of today and now there are more chances for these insects to lay eggs on plastic. In Paragraph 5 the writer tells us the reason why there was no increase in the insects despite an increase in eggs.

The third part is the last paragraph. It concludes that researchers are more concerned that the increase of these striders has a potential influence on the ecology because of the proliferation of plastic and these tiny pieces of plastic do have the potential to change the ecosystem of the open sea.

Prefixes and Suffixes

prefix: pro-

(1) 表示“赞同，亲”

(2) 表示“代替”

(3) 表示“向前，在前，预先”

(4) 表示“很多”

同缀词：

proficient	*adj.*	精通的，熟练的
prologue	*n.*	前言，序言
protrude	*v.*	向前突出

根据词缀猜下列词的词义：

1. provident	*adj.*	______________
2. prominent	*adj.*	______________
3. prospect	*n.*	______________
4. protrude	*n.*	______________
5. prolong	*n.*	______________

prefix: multi-

表示“很多”

同缀词：

multilingual	*adj.*	多种语言的
multimedia	*n.*	多媒体
multiply	*v.*	乘，繁殖

根据词缀猜下列词的词义：

6. multiform	*adj.*	______________
7. multiple	*adj.*	______________
8. multitude	*n.*	______________
9. multiplex	*adj.*	______________
10. multilateral	*adj.*	______________

suffix: -wise

表示“方向，状态”

同缀词：

coastwise	*adj.*	近海的，沿岸的
crabwise	*adv.*	横斜地，小心地

根据词缀猜下列词的词义：

11. clockwise	*adj.& adv.*	______________
12. endwise	*adj.*	______________
13. sidewise	*adv.*	______________
14. otherwise	*adv.&conj.*	______________



Synonyms

waste, garbage, rubbish, litter, debris, junk
这些名词均有“废物，垃圾”之意。

waste：普通用词，概念广泛，指任何被丢弃的东西。

garbage：主要指有机废料，包括厨房的剩菜剩饭或不能再用的食物。也可作引申用。

rubbish：普通用词，指任何成堆的、破损的、用过的或无用的东西，尤指弃掉的垃圾堆。也可作引申用。

litter：指四下乱丢物品的总称，尤指散落于地，有碍观瞻的废物。

debris：着重指因爆炸、火灾、或意外事件而被分解、分裂或破坏后剩下的碎片，也指零散的普通废品。

junk：指回收的旧汽车或大型机器，也指毫无实用价值，或破烂物体，但不指垃圾。也可引申为人们所不喜欢的或不想要的东西。

Complete the following sentences with the proper form of the words listed above.

15. The park is full of ___________.

16. Most TV channels are filled with ___________.

17. The government is encouraging the public to recycle their household ___________.

18. You do talk a load of ___________.

19. After the crash, ___________ was scattered over a large area.

20. The process recycles domestic ___________ to produce fertilizer.

temporary, momentary, transient
这些形容词均有“短暂的，瞬间的”之意。

temporary：普通用词，指持续有限的可以计算的时间，着重暂时的存在、应用或效应。

momentary：指瞬间即逝的。

transient：指停留或延续的时间很短。

Complete the following sentences with the proper form of the words listed above.

21. His job in the school is ___________ .

22. We need to have the belief that human life is ___________ .

23. There was a ___________ pause, then he spoke again.

Exercises

Questions 1—5

Complete the summary below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

Halobates sericeus, a pelagic strider, proliferates itself by 1 __________ on floating objects. These marine insects can be found in the open ocean and feeds themselves on 2 __________ and wormlike 3 __________. In recent studies researchers lay their emphasis on the idea that pelagic striders may have superiority over oceanic animals because of the 4 __________. However, tiny pieces of plastic could 5 __________ of the open ocean.

Questions 6—11

Do the following statements agree with the information given in the passage? In brackets ***6—11****, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

6. (　　) The higher floating objects concentrated, the less possibility a water strider lays its eggs.
7. (　　) A rapid increase of some oceanic species may result in ecosystem disturbance.
8. (　　) Striders are preys of crabs, squid and tiny crustaceans.
9. (　　) The organisms on the floating plastic grow and die quickly and reproduce in a slow way.
10. (　　) The data documented a rise in both eggs and insects from the early of 1970s.
11. (　　) A water strider lays its eggs on a feather.

Questions 12—14

Translate the sentences from the passage into Chinese.

12. Garbage in the North Pacific may help some species proliferate at the expense of others.

____

____

13. A new study by researchers at the Scripps Institution of Oceanography in La Jolla, California shows that the concentration of plastic has increased by 100 times over the past 40 years in the North Pacific Subtropical Gyre—an enormous calm spot in the middle of a clockwise rotation of ocean currents that falls between East Asia and the West Coast of the U.S., with Hawaii as its approximate midpoint.

____

____

14. More than half of the ocean is part of the subtropical gyres, and changing the way that these gyres function by adding lots of plastic trash could have unpredictable consequences.

____

____

Section B

Reading Skills

Skimming

When reading newspapers or other types of essays, we often skim articles before deciding whether we need to read more carefully or not. Skim refers to read quickly in order to get the general idea of a passage. Unlike scanning which involves searching for details or isolated facts, skimming requires the reader to stress only information and clues which help us to understand an idea of the central theme or topic of a piece of essay.

When skimming, we read only sentences that are selected intentionally to grasp the general idea. We also need to use textual clues such as underlined or italicized words, headlines or subheadings, paragraphing and spacing. It is unnecessary for us to read sentence by sentence or word by word.

Once we grasp a main idea of an article, we may decide to read the entire section carefully, or just to scan for detailed pieces of information in order to answer questions which have occurred to us.

The following is an example from Passage 1 in this unit to explain how to skim for the main idea.

> *After having a glancing at the title of the article and the first paragraph, we can know that this article will tell us plastic can help some sea species populate massively and such population may have a surprising effect on ecosystems.*

If we are interested in this topic, we then skim for other places for the information in question. In fact, we only read the first sentence in Paragraphs 2, 3 & 6 and the last sentence in the fourth paragraph and the last two sentences in the sixth paragraph in the passage. For instance, the first sentence in Paragraph 4 tells us the information that plastic is more common and provides a nest where striders lay their eggs:

Now floating plastic pieces are more common… (Paragraph 4)

The last two sentences in paragraph 6 tells us that this is the place about the potential effects on the ecosystems.

… by adding lots of plastic trash could have unpredictable consequences… (Paragraph 6)

Reading Passage 2

Social Showdown

A Google may be one of the most popular and prosperous enterprises the world has ever known, but it has a well-developed jealous streak. For years, much of its jealousy has been directed at Facebook, where more than 750 million active users collectively spend more than 700 billion minutes each month. And while Facebook has been busy connecting most of the planet's online population, Google's social-networking efforts, such as Orkut, Jaiku, Dodgeball, Wave and Buzz, have either flopped or floundered. (O.K., Orkut became a phenomenon, but only in Brazil and India.)

B On June 28, the search-engine kingpin tried again, this time with a loosely knit collection of service, it's calling the Google+ project. It was instantly greeted as a plausible threat to Facebook's dominance, a starting assessment by bloggers and journalists given that some of these same folks have long delighted in bashing Google for its lack of social skills. Persuading large numbers of consumers to decamp from Facebook will be an immense challenge, but Google has already changed the competitive dynamic. Among the curious checking out Google+ has been Facebook's Mark Zuckerberg, who set a record by attracting more than 110,000 followers (as of July 11) on the nascent network.

C Wide swaths of Google+ are eerily familiar, such as the +1 button, which serves precisely the same thumbs-up function as Facebook's like button. It also piggybacks on existing Google offering such as Gmail and the Picasa-sharing service. Overall, though, Google+ feels fresh and inventive. An addictive video-chat feature named Hangouts lets you use a webcam to pal

around with up to nine other people. Sparks, a special-interest search engine, helps you find stuff to share. And the interface—designed in part by Andy Hertzfeld, one of the creators of the Macintosh—is as playful as Facebook's.

D Unlike Facebook (and like Twitter), Google+ lets you follow other members without getting their permission. You do, however, need to put every person you follow into one or more Circles: customizable groupings such as family, friends, acquaintances, book-club members, poker buddies and so on. Each time you share a status update, photo or other item, you can restrict it in certain Circles—an option that reduces the noise level and enhances privacy.

E For now, Google+ is defined as much by what's missing as by that's there. As I write, Google hasn't thrown the doors wide open; it began by letting in VIPs, then started admitting batches of wait-listers. There are no teeming masses of humanity poking one another, sharing videos of windsurfing pigs allowing applications like FarmVille to automatically push out updates on their behalf. In fact, Google+ has not third-party apps or auto-generated anything, which makes the whole experiences less overwhelming and spammy than Facebook.

F Of course, Facebook probably felt more cozy and inviting back in 2004, when it had few features and was inhabited entirely by Zuckerberg's Harvard classmates. If an ever expanding Google+ develops into a slight variant of today's Facebook, it will be a shame. Google has the opportunity to give the world something it could really use: a big-time social network with a small-town feel.

(Adapted from *Time*, July 2011, anonymous)

Notes

- **Orkut** 我酷网站或偶酷网站，是 Google 旗下的社交网站，主要提供帮助使用者认识新老朋友并维持已有的关系的服务。
- **Jaiku** 凯酷网站，于 2006 年 2 月由来自芬兰的 Jyri Engeström 和 Petteri Koponen 创立的一家社交网站，同年 7 月启用。2007 年 10 月 9 日被 Google 收购。
- **Dodgeball** 躲避球，一种游戏，游戏双方轮流将球扔向对方，躲避成功者为胜。
- **FarmVille** 农场乡村，于 2009 年由 Zynga 开发的一种农场模拟社交游戏。

New Words

flop [flɒp]
vi. to fail utterly; collapse（指书、戏剧等）彻底失败

flounder ['flaʊndə]
vi. to behave awkwardly; have difficulties 挣扎，折腾

kingpin ['kɪŋpɪn]
n. the most important person in a group or undertaking 主要人物

bash [bæʃ]
vt. to attack by hitting or punching hard 痛击，猛击

decamp [dɪ'kæmp]
vi. to run away quickly（突然而常为秘密地）(携某物）逃走

nascent ['næsnt]
adj. being born or beginning 初期的，初生的，开始形成的

swath [swɔːθ]
n. the space created by the swing of a scythe or the cut of a mowing machine 一大片土地

eerily ['ɪərɪlɪ]
adv. in an unnatural strange or eccentric manner 引起神秘感或害怕地

piggyback ['pɪgɪbæk]
vt. to support on the back and shoulders 背着，肩驮，背负式运输

webcam ['webkæm]
n. a digital camera designed to take digital photographs and transmit them over the Internet 网络摄像机，网络摄影机

batch [bætʃ]
n. a collection of things or persons to be handled together（食物、药物等的）一批生产的量

app [æp]
n. short for application software but is frequently used to mean mobile app (more specific) or computer program (more general) 应用程序

Exercises

Questions 15—20

Answer the questions below. Choose ***NO MORE THAN FOUR WORDS*** *from the passage for each answer.*

15. What's the current situation of Google's social-networking efforts?

____

16. What comments did bloggers and journalists make on Google+ project?

____

17. On what date had more than 110,000 people ever been Mark's followers on the emerging network?

____

18. How many friends could chat via hangouts at the same time?

____

19. What did one need to do once he/she follow others?

____

20. Compared with Facebook's, what comments did the writer make on Google+?

____

Questions 21–26

*The passage has six paragraphs, **A–F**. Choose the correct heading for each paragraph from the list of headings below.*
*Write the correct number, **i–viii**, in blanks **21–26**.*

List of Headings

- i Google developed a project to challenge its competitor
- ii Google should have done better
- iii The writer introduced Google+'s difference from Facebook
- iv Google has become a target of public criticism
- v Google+ and Facebook had much in common
- vi Google+ had its own limitations
- vii Google was in bust
- viii Facebook has become the biggest rival to Google

21. Paragraph **A** ____________
22. Paragraph **B** ____________
23. Paragraph **C** ____________
24. Paragraph **D** ____________
25. Paragraph **E** ____________
26. Paragraph **F** ____________

Questions 27–29

Translate the sentences from the passage into Chinese.

27. For years, much of its jealousy has been directed at Facebook, where more than 750 million

active users collectively spend more than 700 billion minutes each month.

28. Each time you share a status update, photo or other item, you can restrict it in certain Circles—an option that reduces the noise level and enhances privacy.

29. Of course, Facebook probably felt more cozy and inviting back in 2004, when it had few features and was inhabited entirely by Zuckerberg's Harvard classmates.

Reading Passage 3

About Confucius Institute, NTU

Confucius Institute, Nanyang Technological University (CI-NTU) is jointly established by the Ministry of Education of the People's Republic of China and the Nanyang Technological University (NTU). It is the first Chinese language and culture school in Singapore co-sponsored by the Chinese central government.

Inaugurated in August 2005, CI-NTU is a joint collaboration between the Office of Chinese Language Council International (Hanban) and Nanyang Technological University. CI-NTU aims to strengthen Singapore's Mandarin capabilities, provide Singapore with a common platform in learning Chinese language and culture, and enhance the communication link between Singapore and Chinese communities in other parts of the world.

Being one of the earliest Confucius Institute to be set up, CI-NTU is partnering with one of the most renowned University in China, Shandong University.

With the strong support from the Office of Chinese Language Council International and the College of International Education, Shandong University, CI-NTU engages top-notch Chinese lecturers and educators from renowned China universities.

CI-NTU will give full play to its academic excellence and reputation in Chinese culture, sharing invaluable pedagogical resources and the fruit of its laborious researches with the Southeast Asian region and beyond.

The institute is located within NTU One-North campus and neighboring the likes of the HQ of Ministry of Education and Biopolis, the epicenter of One-North. The Institute has facilities that include lecture rooms, reading rooms, lounge area, resource center and recreation zones.

Minister Mentor Lee Kuan Yew and his Excellency Mr. Xu Jialu, Vice-Chairman of the Standing Committee of the National People's Congress of China officially opened Confucius Institute, NTU on 14 July 2007.

(Adapted from *Overseas English*, October 2011, anonymous)

Notes

- **Confucius Institutes** 孔子学院，由中华人民共和国教育部下属的国家汉语国际推广领导小组办公室管理，总部设在北京，境外的孔子学院都是其分支机构，目的是向世界推广汉语，增进世界各国对中国的了解。
- **Hanban** 汉办，为国家汉语国际推广领导小组办公室的简称，挂靠于中华人民共和国教育部，与教育部对外汉语教学发展中心和孔子学院总部合署办公。

Exercises

Questions 30—35

Answer the questions below. Choose ***NO MORE THAN FOUR WORDS*** *from the passage for each answer.*

30. Who is the co-sponsor of CI-NTU?

____

31. On what date did CI-NTU open?

____

32. Who is the partner of CI-NTU?

____

33. Where are the Chinese teachers from?

____

34. What activities will be held in CI-NTU?

____

35. Where is CI-NTU located?

____

Unit 3

Section A

Reading Passage 1

Last Man on the Moon: A Talk with Gene Cernan

Forty years ago today, Gene Cernan, commander of Apollo 17, climbed back up the ladder of his lunar module and took off from the moon's Taurus-Littrow Valley—thus ending America's lunar program. Cernan, who also orbited the Earth aboard Gemini 9 and orbited the moon on Apollo 10, is frustrated with the aimlessness of America's current space program, but is confident that one day—even if it's a distant day—we'll return to the moon. As Apollo 17's 40th anniversary approached, he spoke with Time:

A One of the things I've observed is that almost none of the questions I get pertain to the technology. People don't ask about how fast you were going through the perilune or the apolune when you were entering the shadow. No one cares. The questions people have are about the humanity of the experience. What did it feel like? How did you sleep? Were you scared? They also want to know about the experience of taking my first step on the moon. I say it was important to me and it's mine and no one can take it away. But the memorable steps were the last ones.

B What I saw as I looked at the Earth from the moon was that it was all too beautiful to have happened by accident. This could not have been the result of two dust particles coming together. I wanted to do grab that crescent Earth, put it in my spacesuit and take it home and show it to people. Looking up at the Earth, I had the sense that I was sitting on God's front porch.

C We spent three hard days working and we had a mission to accomplish. I was aware of what could happen if I fell down and my suit tore or if the engine didn't light, but we didn't live under an umbrella of fear. What we were always conscious of was the environment. We're digging trenches and core samples and taking pictures of that magnificent desolation—the mountains surrounding

us were higher than the grand canyon is deep. Jack [Schmitt, lunar module pilot] did a great job, but he's a lunar geologist. He was in that test tube much of the time. I had to say to him, "Jack, take a time out. You owe it to yourself to look over your shoulder at where you are."

D Jim [Lovell, Apollo 13's commander] and I are still very close and I was with him in Chicago not long ago. I talk to Jim about the 13 experience and even I have a hard time grasping what those guys had to go through. Post-Apollo 13 I went back out to the moon and the only thing I could do was put the dangers out of my mind. One thing I know though: People like to say failure was not an option, but you know what? Failure was an option. Failure was very much on the table. I was in the simulator trying to figure out how they could fire the service propulsion engine without making the whole ship go ass over tea kettle. But again we just trained ourselves not to think about the danger.

E You get back home and everything's normal. I was living on the moon for 72 hours and then here I was now back in this real world. I'd often ask myself, "Did what I think happened really happen?" I was in the space program for 13 years and it was like someone just cut those years from my life, put me in a different world—literally in the case of Apollo 17—and then sent me back to my original world. It's almost like you've lived two different lives.

F We're really just the tip of the spear—the Armstrongs and the Shepards and the Glenns and the Lovells. We represented the people who sent us. It's important to remember that everyone who went to the moon came home to talk about it. That says something about who we are as a nation and what we can do. That's why as long as we're still around, we have a responsibility to keep young kids inspired.

(Adapted from http://science.time.com/2012/12/13/last-man-on-the-moon-a-talk-with-gene-cernan, written by Jeffrey Kluger)

Notes

- **Gene Cernan** 尤金·塞尔南，1934 年 3 月出生，曾是一位美国国家航空航天局的宇航员，美国海军军官退休。他曾三次执行太空任务。
- **Apollo 17** 阿波罗 17 号，是美国国家航空航天局的“阿波罗计划”中的第十一次载人任务，也是“阿波罗计划”中唯一在夜间发射的任务。
- **Apollo 10** 阿波罗 10 号，是“阿波罗计划”中第四次载人飞行任务，第一次（也是唯一的载人土星 5 号）在 39B 发射台发射，也是第二次环绕月球的载人任务，该任务首次将

登月舱带入月球轨道进行测试。阿波罗 10 号是人类航天史上第一个从太空发回彩色现场录像的航天飞机。

- **Taurus–Littrow** 陶拉斯 - 利特罗，是位于月球 20.0°N 31.0°E 附近的一座山谷，为 1972 年 11 月阿波罗 17 号太空登月任务在月球上的着陆点。

New Words

lunar ['lu:nə]
adj. relating to the moon 月的，月球的，阴历的

module ['mɒdju:l]
n. a part of a spacecraft which can operate by itself, often away from the rest of the spacecraft（宇宙飞船上各个独立的）舱

perilune ['perəˌlu:n]
n. periapsis in orbit around the moon 近月点

apolune [əpɒl'ju:n]
n. apoapsis in orbit around the moon 远月点

canyon ['kænjən]
n. a ravine formed by a river in an area with little rainfall 峡谷

simulator ['sɪmjuleɪtə]
n. a machine that simulates an environment for the purpose of training or research 模拟装置，模拟器

Text Analysis

This passage is a first person narration, which describes the talks with Cernan who orbited the moon on Apollo 10. Cernan, the retired astronaut, recalls the extraordinary experiences that the pilots worked on the moon. Also, he believes astronauts have the responsibility to encourage young generations and they will return to the moon in the future.

The passage contains seven paragraphs. In Paragraph A, Cernan depicts that people are eager to ask them some questions about the humanity of the experience instead of those technological issues. And he thinks something else is still memorable. Paragraph B is Cernan's description of fascinating scenery of outer space which deeply appealed to him. Paragraph C tells us working on the moon was tough, busy and dangerous but pilots still had fun. Paragraph D shows that astronauts prepared to face the dangers and failures all the time. Paragraph E is about the total difference between life on the Earth and the space. Returning to the Earth means they had to readapt to the original life. In the last paragraph, F, Cernan affirms astronauts' uniqueness and their responsibility to inspire young people.

Prefixes and Suffixes

suffix: -ist

(1) 表名词，表示“信仰者，专家或人”

(2) 有些也可作形容词

同缀词：

capitalist	*n.&adj.*	资本家，资本家的
socialist	*n.&adj.*	社会主义者，社会主义的
novelist	*n.*	小说家

根据词缀猜下列词的词义：

1. extremist	*n.*	________
2. materialist	*n.*	________
3. economist	*n.*	________
4. feminist	*n.*	________
5. nationalist	*n.*	________

suffix: -er

(1) 表动词，“反复做”

(2) 表名词，“……人或物品，机器”

同缀词：

heater	*n.*	加热器
washer	*n.*	清洗者，洗衣机
batter	*v.*	接连重击，磨损

根据词缀猜下列词的词义：

6. manufacturer	*n.*	________
7. chatter	*n.*	________
8. waver	*n.*	________
9. stutter	*n.*	________

prefix: re-

(1) 表示“回，向后，相反，不”

(2) 表示“一再，重新”

同缀词：

reflect	*v.*	回想，反射
reverse	*v.*	反转，颠倒
revolt	*v.*	反叛
repeat	*v.*	重复

根据词缀猜下列词的词义：

10. reproach *v.* ____________
11. reiterate *v.* ____________
12. reassure *v.* ____________
13. rearrange *v.* ____________

Synonyms

club, association, institute, league, union, society 这些名词均有“社团，会社，协会”之意。

club：指俱乐部或会社，其成员因志同道合，有共同兴趣、爱好而组织到一起进行社交、娱乐或体育等活动。

association：指较为正式的组织，强调兴趣和需要的一致性。

institute：指为专门的目标而建立的学会或研究所。

league：指为了共同的目的和利益而组成的社团、同盟或联合会。

union：多指工会，也指学会或协会。

society：可与 association 换用，但前者的宗旨更严格，会员之间联系更紧密，活动更积极。

Complete the following sentences with the proper form of the words listed above.

14. Research ____________ are often linked to a particular industry.
15. Manchester United was the ____________ champion of last season.
16. I feel that women in all types of employment can benefit from joining a(n)____________.
17. Our ____________ has ordered a great many instruments from the company.
18. The local ____________ has disaffiliated from the National Athletic Association.
19. This reflects attitudes and values prevailing in ____________.

grumble, complain, murmur 这些动词均有“抱怨，埋怨”之意。

grumble：指持续地抱怨无关紧要的事情。

complain：侧重抱怨自己不满意的事情。

murmur：多指因不满某人或某事而背着人自言自语地埋怨。

Complete the following sentences with the proper form of the words listed above.

20. The employee ____________ that he had to do extra work until midnight again.
21. She ____________ that she never had any time to herself.
22. Children always ____________ about school dinners.

Exercises

Questions 1–5

*The passage has six paragraphs, **A–F**. Choose the correct heading for paragraphs **B–F** from the list of headings below.*
*Write the correct number, **i–viii**, in blanks **1–5**.*

List of Headings

i Readapting to life on the Earth
ii Dissatisfaction with people's questions
iii Working and having fun on the moon
iv The public's enduring fascination with the astronauts
v The uniqueness of astronauts
vi Attractive scenery of the outer space
vii Disappointment with current space program
viii Facing danger with bravery

1. Paragraph **B** ____________
2. Paragraph **C** ____________
3. Paragraph **D** ____________
4. Paragraph **E** ____________
5. Paragraph **F** ____________

Questions 6–8

*Answer the questions below. Choose **NO MORE THAN FIVE WORDS AND/OR A NUMBER** from the passage for each answer.*

6. About what kind of questions did people often ask astronauts?

____

7. What were the astronauts usually aware of when they worked hard on the moon?

____

8. What separated Cernan from his ordinary life and made it totally different?

____

Questions 9—11

Translate the sentences from the passage into Chinese.

9. Cernan, who also orbited the Earth aboard Gemini 9 and orbited the moon on Apollo 10, is frustrated with the aimlessness of America's current space program, but is confident that one day—even if it's a distant day—we'll return to the moon.

____

____

10. I wanted to do grab that crescent Earth, put it in my spacesuit and take it home and show it to people. Looking up at the Earth, I had the sense that I was sitting on God's front porch.

____

____

11. That says something about who we are as a nation and what we can do. That's why as long as we're still around, we have a responsibility to keep young kids inspired.

____

____

Section B

Reading Skills

Reading for the Main Idea in a Paragraph

A paragraph consists of groups of sentences linked to some ideas or subjects. When you read a paragraph, you seek the main idea of each sentence. Adding up these main ideas, you find that each sentence helps establish the general idea of the paragraph, the basic subject that all the sentences are related to. Being able to determine the main idea of a paragraph is one of the most useful reading skills. You can employ it in any type of reading. Here is one example from Passage 1 in this unit:

One of the things I've observed is that almost none of the questions I get pertain to the technology. People don't ask about how fast you were going

through the perilune or the apolune when you were entering the shadow. No one cares. The questions people have are about the humanity of the experience. What did it feel like? How did you sleep? Were you scared? They also want to know about the experience of taking my first step on the moon. I say it was important to me and it's mine and no one can take it away. But the memorable steps were the last ones.

Main idea: The public has enduring fascination with the lunar astronauts.

Sometimes, it is necessary to summarize the main idea when no sentence in the paragraph evidently presents it.

Reading Passage 2

Treatment for AIDS

There is no cure for AIDS at this time. However, a variety of treatments are available that can help keep symptoms at bay and improve the quality and length of life for those who have already developed symptoms.

Antiretroviral therapy suppresses the replication of the HIV virus in the body. A combination of several antiretroviral drugs, called highly active antiretroviral therapy (HAART), has been very effective in reducing the number of HIV particles in the bloodstream. This is measured by the viral load (how much free virus is found in the blood). Preventing the virus from replicating can improve T-cell counts and help the immune system recover from the HIV infection.

HAART is not a cure for HIV, but it has been very effective for the past 12 years. People on HAART with suppressed levels of HIV can still transmit the virus to others through sex or by sharing needles. There is good evidence that if the levels of HIV remain suppressed and the CD4 count remains high (above 200 cells/mm3), life can be significantly prolonged and improved.

However, HIV may become resistant to one combination of HAART, especially in patients who do not take their medications on schedule every day. Genetic tests are now available to determine whether an HIV strain is resistant to a particular drug. This information may be useful in determining the best drug combination for each person, and adjusting the drug regimen if it starts to fail. These tests should be performed any time a treatment strategy begins to fail, and before starting therapy.

When HIV becomes resistant to HAART, other drug combinations must be used to try to suppress the resistant strain of HIV. There are a variety of new drugs

on the market for treating drug-resistant HIV.

Treatment with HAART has complications. HAART is a collection of different medications, each with its own side effects. Some common side effects are:

▲ Collection of fat on the back and abdomen
▲ Diarrhea
▲ General sick feeling (malaise)
▲ Headache
▲ Nausea
▲ Weakness

When used for a long time, these medications increase the risk of heart attack, perhaps by increasing the levels of cholesterol and glucose (sugar) in the blood.

Any doctor prescribing HAART should carefully watch the patient for possible side effects. In addition, blood tests measuring CD4 counts and HIV viral load should be taken every 3 months. The goal is to get the CD4 count as close to normal as possible, and to suppress the amount of HIV virus in the blood to a level where it cannot be detected.

Other antiviral medications are being investigated. In addition, growth factors that stimulate cell growth, such as erthythropoietin (Epogen and Procrit) and filgrastim are sometimes used to treat AIDS-associated anemia and low white blood cell counts.

Medications are also used to prevent opportunistic infections if the CD4 count is low enough. This keeps AIDS patients healthier for longer periods of time. Opportunistic infections are treated when they happen.

(Adapted from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001620/, anonymous)

Notes

■ **Highly Active Anti-Retroviral Therapy (HAART)** 高效抗逆转录病毒治疗，由美国国立健康研究院（NIH）和一些其他组织向有 AIDS 相关症状的患者推荐使用的抗逆转录病毒药物疗法。

■ **Cluster of Differentiation 4 receptors (CD4)** 表面抗原分化簇 4 受体，是辅助 T 细胞的表面标记（surface markers）之一，也是辅助 T 细胞行使其功能的重要受体。

■ **erthythropoietin** 促红细胞生成素

- **Epogen** 红细胞生成素针剂，是一种抗贫血药。
- **Procrit** 重组人类红细胞生成素 α
- **filgrastim** 非格司亭，是一种粒细胞集落刺激药物。

New Words

antiretroviral [ˌæntɪˌretrəʊ'vaɪrəl]
adj. 抗逆转录病毒的，抗后病毒的

replication [ˌreplɪ'keɪʃən]
n. (genetics) the process whereby DNA makes a copy of itself before cell division 复制

particle ['pɑːtɪkl]
n. a tiny piece of anything 微粒，颗粒

prolong [prə'lɒŋ]
vt. to lengthen or extend in duration or space 延长，拉长

regimen ['redʒɪmən]
n. a systematic plan for therapy (often including diet)（为病人规定的）生活规则，养生法

complication [ˌkɒmplɪ'keɪʃən]
n. any disease or disorder that occurs during the course of (or because of) another disease 并发症

abdomen ['æbdəmən]
n. the region of the body of a vertebrate between the thorax and the pelvis 腹部

diarrhea [ˌdaɪə'rɪə]
n. frequent and watery bowel movements; can be a symptom of infection or food poisoning or colitis or a gastrointestinal tumor 腹泻

malaise [mə'leɪz]
n. physical discomfort (as mild sickness or depression) 不适，萎靡不振

nausea ['nɔːzɪə]
n. the state that precedes vomiting 作呕，恶心，反胃

cholesterol [kə'lestərɒl]
n. an animal sterol that is normally synthesized by the liver 胆固醇

glucose ['gluːkəʊs]
n. a monosaccharide sugar that has several forms; an important source of physiological energy 葡萄糖，右旋糖

anemia [ə'ni:mi:ə]
n. a deficiency of red blood cells 贫血症

opportunistic [ˌɒpətju:'nɪstɪk]
adj. taking immediate advantage, often unethically, of any circumstance of possible benefit 机会主义的，机会主义者的，投机取巧的

Phrases and Expressions

at bay 陷入困境，陷入绝境

Exercises

Questions 12—16

Complete the sentences below. Choose ***NO MORE THAN FIVE WORDS AND/OR A NUMBER*** *from the passage for each answer.*

12. Highly active antiretroviral therapy plays an effective role in decreasing ____________ in the bloodstream.
13. Genetic tests are taken to find out whether an HIV strain ____________ some medicine.
14. The medicines of HAART will probably cause ____________ if taken for a long time.
15. Blood tests should be used ____________ to detect CD4 counts and HIV viral load.
16. If the CD4 count becomes very low, ____________ will be avoided to prolong patients' lives.

Questions 17—19

Translate the sentences from the passage into Chinese.

17. However, a variety of treatments are available that can help keep symptoms at bay and improve the quality and length of life for those who have already developed symptoms.

____

____

18. There is good evidence that if the levels of HIV remain suppressed and the CD4 count remains high, life can be significantly prolonged and improved.

____

____

19. The goal is to get the CD4 count as close to normal as possible, and to suppress the amount of HIV virus in the blood to a level where it cannot be detected.

____

____

Reading Passage 3

Underwater Photography

When photographing underwater, there are three shooting techniques you will find particularly useful as they enable you to produce remarkable and appealing pictures without elaborate set-ups.

Macro shot

For small underwater subjects, choose the Macro Mode. Move to within minimum focusing distance of your subject and depress the shutter button halfway. Then using the LCD monitor, move the camera to sharpen your image. Finally, press the shutter button all the way to take the picture. Utilize the flash diffusion plate on the case to ensure even underwater flash lighting.

Wide angle shot

The first thing to master with wide-angle shots is keeping the water color blue. To keep water looking blue, first set the White Balance: choose "Daylight" in shallow water and "Cloudy" for greater depths. Then, get below your subject. Aim upward towards the sky to create dramatic silhouettes.

If your PowerShot digital camera has Underwater Scene Mode, select it for the best results when shooting underwater.

Panorama shot

First, select the Stitch Assist Mode on your PowerShot digital camera. Shoot a series of overlapping images. Then use the PhotoStitch Software, supplied with your camera, to automatically combine images into a breath-taking panorama on your computer.

On land

You can also use your Canon Waterproof Case on land—in environments where snow, sand, excess humidity or dust could lead to damage. Ideal for skiing and many other activities, a Canon Waterproof or All-weather Case provide an

added measure of safety for your PowerShot camera on land.

(Adapted from http://www.usa.canon.com/cusa/consumer/standard_display/UW_Shooting_Tips, anonymous)

Notes

- **PowerShot digital camera** 佳能 PowerShot 数码相机，发布于 1996 年，是当时全球最畅销的数码相机之一。

New Words

shutter ['ʃʌtə]
n. a mechanical device on a camera that opens and closes to control the time of a photographic exposure 快门

LCD
abbr. (Liquid Crystal Display) a digital display that uses liquid crystal cells that change reflectivity in an applied electric field; used for portable computer displays and watches etc. 液晶显示屏，液晶显示器

silhouette [ˌsɪlʊ'et]
n. an outline of a solid object (as cast by its shadow) 轮廓，剪影

panorama [ˌpænə'rɑːmə]
n. a picture (or series of pictures) representing a continuous scene 全景照片，一连串景象或事

stitch [stɪtʃ]
n. a link or loop or knot made by an implement in knitting, crocheting, embroidery, or sewing 一针，缝法

overlap [ˌəʊvə'læp]
vi.&vt. coincide partially or wholly 重叠，与……部分相同

breath-taking ['breθ'teɪkɪŋ]
adj. tending to cause suspension of regular breathing 惊人的，惊心动魄

Exercises

Questions 20—24

Do the following statements agree with the information given in the passage? In brackets ***20–24****, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

20. (   ) Macro Mode requires maximum focusing distance of the small subject.
21. (   ) You can create greater images if you use elaborate set-ups.
22. (   ) Setting the White Balance is the important step to use wide-angle shots.
23. (   ) The Stitch Assist Mode and the PhotoStitch Software can help produce overall views.
24. (   ) Canon Waterproof camera can be used on land except in some bad situations because it would be ruined.

Questions 25—26

Translate the sentences from the passage into Chinese.

25. Then using the LCD monitor, move the camera to sharpen your image. Finally, press the shutter button all the way to take the picture. Utilize the flash diffusion plate on the case to ensure even underwater flash lighting.

____

____

26. Aim upward towards the sky to create dramatic silhouettes. If your PowerShot digital camera has Underwater Scene Mode, select it for the best results when shooting underwater.

____

____

Unit 4

Section A

Reading Passage 1

Good Chappe

As the 2012 transit of Venus rolled around, I got caught up in the excitement, which led me to read *The Day the World Discovered the Sun*, a new account of the arduous attempts by the scientific community to observe the two Venus transits of the 1760s. (My ensuing audio interviews with author Mark Anderson are archived at www.ScientificAmerican.com/podcast.)

Until I read the book, I never knew how much I had in common with 18th-century French astronomer Jean-Baptiste Chappe d'Auteroche. Well, we had one big thing in common. In 1769 he traveled to the Sea of Cortez, between the Baja peninsula and mainland Mexico, to observe the transit. His data collection, combined with those of other sky watchers at different latitudes, would enable astronomers to calculate the distance from Earth to Venus and the sun. In 1991 I went to the same location, which lay in the narrow band that would experience another spectacular astronomical event, a total eclipse of the sun.

Let's compare the two journeys.

In September 1768 Chappe sails from France to Spain, schlepping enough equipment to construct an observatory in his ultimate destination, Cabo San Lucas, which won't be a hopping resort town for another two centuries. On July 4, 1991, I leave New York City on a train for Los Angeles with a couple of astronomically interested friends—we figured we'd see the country along the way from our sleeper cars. I pack a couple of Hawaiian shirts.

It takes Chappe three weeks to get to Cádiz. Twenty hours after leaving New York, my amigos and I arrive in Chicago, where we're forced to change trains and endure a six-hour layover. Fortunately, there's a food fair along the lakeshore.

In December 1768 Chappe begins a 77-day transatlantic voyage onboard what he

called "our little nutshell." On July 5, 1991, my group leaves Chicago on a double-decker superliner train for Los Angeles.

On March 6, 1769, Chappe's ship sets anchor near Veracruz. The vessel sits there for two days before local officials send a skiff to bring Chappe to shore. A hurricane almost destroys the anchored ship and its cache of astronomical equipment. Two days after leaving Chicago, my team pulls into the City of Angels, having taken in a lovely traverse of the Colorado River from the observation car. We head to a nice hotel.

In mid-March, Chappe begins traveling over land to the Pacific side of Mexico, which he will reach on April 15. On July 7, 1991, my buddies and I find a decent Mexican restaurant for dinner.

On April 19, 1769, Chappe sets sail onboard a small vessel called La Concepción. Unfriendly currents and winds keep him and his mates at sea for a full month before they reach Baja. On July 8, 1991, my friends and I leave the Port of Los Angeles onboard the cruise ship Viking Serenade. Built in 1982, it had been the world's largest cruise ferry and was later converted into a luxury cruise ship. Other passengers include moon-walking astronaut Harrison Schmitt and amateur astronomer John Astin, television's Gomez Addams. I and the boys rough it in our windowless interior cabin.

For a week and a half in late May 1769, Chappe and his crew build their observatory in San José del Cabo. For three days onboard the cruise ship, as it sails down Baja and up into the Sea of Cortez, my crew attends astronomy lectures, plays Ping-Pong under bright blue skies on the top deck, and eats from dawn till the midnight buffet.

On June 3, 1769, Chappe lucks out—perhaps his first and last brush with good fortune on this journey—and gets a clear day to make his observations of the Venus transit. His data will help scientists determine the dimensions of the solar system. On July 11, 1991, an overcast sky threatens our eclipse watching. But using satellite weather images, the captain speeds to a cloudless spot, where we observe six minutes and 53 seconds of totality, just 38 seconds less than the theoretical maximum. It's very cool.

Following the transit, Chappe and many of his men fall victims to a typhus epidemic. Following the eclipse, we set sail back to L.A. Rough seas make me a bit queasy.

On August 1, 1769, Chappe passes away. Among his last words: "I have fulfilled my purpose, and I die happy." On July 14, 1991, my friends and I arrive back in Los Angeles and head to the train station. Among our last words there before another

three-day train trip: “Maybe we should have flown.”

(Adapted from *Scientific American*, August 2012, written by Steve Mirsky)

Notes

- **Venus transit** 金星凌日
- **Jean-Baptiste Chappe d’Auteroche (23 March 1722 – 1 August 1769)** 让·巴蒂斯特，法国人，因 1761 年和 1769 年观测到金星凌日而闻名。
- **The Baja California peninsula** 下加利福尼亚半岛，位于墨西哥西北，将太平洋和加利福尼亚海湾分割开。
- **Cabo San Lucas** 圣卢卡斯角，位于墨西哥加利福尼亚半岛最南端，属南下加利福尼亚州的洛斯卡沃斯市。
- **Cádiz** 加第斯，是西班牙人最引以为傲的金色沙滩，拥有很多久负盛名的历史遗迹，一座国家公园和五个自然保护区，适宜的气候和柔美的海风，因而成为西班牙人最爱的度假之地。
- **Colorado River** 科罗拉多河

New Words

arduous ['ɑːdjʊəs]
adj. extremely difficult and involving a lot of effort 努力的，艰巨的

schlep [ʃlep]
vt. to carry sth. heavy 携带，搬运

transatlantic [trænzæt'læntɪk]
adj. a transatlantic flight or journey involves crossing the Atlantic Ocean 大西洋彼岸的，横跨大西洋的

nutshell ['nʌtʃel]
n. the hard shell around a nut 坚果的外壳

superliner ['sjuːpəˌlaɪnə]
n. a fast luxurious passenger liner of great size 超级班轮，超级邮船

cache [kæʃ]
n. a place where things are hidden 藏物处，隐藏处

traverse [trə'vɜːs]
vt. to travel, lie, or extend across (an area) 横穿，穿越

eclipse [ɪ'klɪps]
n. one celestial body obscures another 日食，月食

typhus ['taɪfəs]

n. rickettsial disease transmitted by body lice and characterized by skin rash and high fever 斑疹伤寒

queasy ['kwiːzɪ]

adj. feeling that you are going to vomit（指人）想呕吐的，感到恶心的

Text Analysis

The passage is a first-person narration in that the writer employs comparison and contrast to two different yet similar journeys made by Chappe and him respectively. Through comparison and contrast, the writer finds they had one big thing in common.

The first part consists of Paragraph 1 and Paragraph 2. In Paragraph 1 the writer introduces the background that he reads a book and guides us to understand Chappe and he has one big thing in common in Paragraph 2. They have similar journeys on two different astronomical events in different times. One is Chappe's scientific journey to observe the two Venus transits of the 1760s, the other is his journey to experience a total eclipse of the sun.

The second part is made up of the rest paragraphs in the essay. Reading through these paragraphs, we can have a clear understanding on their trips—the different places of departures, the time, the people involved in the journeys, the stories in the process of the journeys, destinations, and the results of the journeys. In this part the writers adopts comparison and contrast, giving us a vivid descriptions of the two journeys based on the time sequences. In the last paragraph, the writer makes a big contrast on the results of the journeys. For Chappe, it was tragic since Chappe unfortunately was dead in the end of the journey. However, it was successful since Chappe finally accomplished the task and left priceless wealth for his followers. For the writer, he finally enjoyed the spectacular astronomical event and returned safely and was going to have another trip.

Prefixes and Suffixes

prefix: pseudo-

表示“假”，“伪”

同缀词：

pseudonym	*n.*	假名，笔名
pseudo-Christianity	*n.*	伪基督教徒
pseudo-scientific	*adj.*	伪科学的

根据词缀猜下列词的词义：

1. pseudo-intellectual *n.* ____________
2. pseudo-asymmetry *n.* ____________
3. pseudo-code *n.* ____________

prefix: arch-

表示“为首的”，“最重要的”，“最坏的”

同缀词：

archbishop	*n.*	大主教
arch-enemy	*n.*	大敌，主要敌人

根据词缀猜下列词的词义：

4. arch-fascist *n.* ____________
5. archbishopric *n.* ____________
6. arch-fiend *n.* ____________

suffix: -arian

表形容词或名词“……的（人）”

同缀词：

vegetarian	*n.&adj.*	素食者（的），食草动物
authoritarian	*adj.*	专制的

根据词缀猜下列词的词义：

7. utilitarian *adj.* ____________
8. totalitarian *adj.* ____________
9. doctrinarian *n.* ____________
10. humanitarian *n.* ____________

Synonyms

duty, obligation, responsibility, function
这些名词均有“义务”之意。

duty：指按道德和法律的标准，一个人永远要尽的义务，强调自觉性。

obligation：指道义上或法律上对他人的义务，强调强制性。也指因作出承诺而被迫履行的某种义务。

responsibility：指任何义务、职责、责任或职务上所尽的本分，强调对他人的责任。

function：指因职务或职业关系去履行某种职责。

Complete the following sentences with the proper form of the words listed above.

11. We need to take ___________ for looking after our own health.
12. A manager should fulfill his own supervisory ___________.
13. It's my ___________ as a parent to bring up and educate my children.
14. Buyers have no legal ___________ to disclose personal financial information.

complete, finish, end, close, terminate, accomplish
这些动词均有"结束，完成"之意。

complete：侧重指完成预定的任务或使某事完善，补足缺少的部分等。

finish：与 complete 基本同义，着重圆满地结束或完成已着手的事。

end：最普通用词，着重事情的完成。也指某种活动因达到目的而自然结束或由于某种原因而突然中止。

close：普通用词，着重行为的终止或结束，不强调其目的。

terminate：强调有一个空间和时间的限度，届时必须终止。书面语用词。

accomplish：正式用词，强调一个过程的完成；也可指依靠努力达到一定目的，或取得一定的结果。

Complete the following sentences with the proper form of the words listed above.

15. We finally ___________ much of work this week.
16. He only need one part to ___________ his writing.
17. I'd like to ___________ my speech by thanking all of you.
18. Shops ___________ only on Christmas Day and New Year's Day.
19. The military operation was ___________ at the end of this month.
20. We finally ___________ the work at the end of this month.

Exercises

Questions 1—8

Complete the summary below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

Chappe set his sail from France to Spain in September 1768 to build an 1___________ in Cabo Sun Lucas. 2___________, he and his mates arrived in Cádiz, and then he began his traversing Atlantic voyage in December 1768. In the early of March, 1769, Chappe's group

got to Veracruz, where an unfriendly wind nearly destroyed their anchored vessel and its 3__________ of equipment. As a result, he and his buddies had to began their trip over the 4__________ until they arrived in the Pacific side of Mexico, which took them almost a month. On April 19, Chappe sailed from Mexico to Baja onboard a small vessel called La Concepción. Chappe's group, at last, arrived in Baja 5__________, and then they began to 6__________ their astronomical observatory in San José del Cabo, which took them one and half a week. On June Chappe and his crew made their 7__________ of the Venus transit on a sunny day. Unfortunately, along the transit Chappe and most of his men were infected with 8__________.

On August 1, 1769, Chappe passed away.

Questions 9—18

*Below is listed the writer's journey. Write the correct letter, **A–K**, in blanks **9–18** according to the order of the writer's journey in the passage.*

A My buddies and I observed the total eclipse for almost 7 minutes with the help of the captain.

B We began our sailing onboard a luxury cruise ship.

C We set sail back to L.A.

D My friends attended lectures and had a meal till the midnight buffet.

E My team left Chicago for Angels, enjoying a loving traversing of the Colorado River.

F We had a meal in a decent restaurant in Mexico.

G We left Chicago for L.A. on train.

H I brought a few Hawaiian shirts and left N.Y. for L.A. on train.

I We head to a nice hotel.

J We arrived in Chicago and had a meal along a lakeshore.

K We arrived back in L.A.

9. __________ 10. __________ 11. __________ 12. __________ 13. __________

14. __________ 15. __________ 16. __________ 17. __________ 18.__________

Questions 19—21

Translate the sentences from the passage into Chinese.

19. As the 2012 transit of Venus rolled around, I got caught up in the excitement, which led me to read *The Day the World Discovered the Sun*, a new account of the arduous attempts by the scientific community to observe the two Venus transits of the 1760s.

____

____

20. His data collection, combined with those of other sky watchers at different latitudes, would enable astronomers to calculate the distance from Earth to Venus and the sun.

____

____

21. In 1991 I went to the same location, which lay in the narrow band that would experience another spectacular astronomical event, a total eclipse of the sun.

____

____

Section B

Reading Skills

Opinions and Facts

Ideas of most reading passages are based on facts and opinions. It is essential to know when we are reading facts and when we are reading the writer's opinions. As a result, in order to achieve a deeper understanding in our reading we should learn how to identify facts from opinions.

Facts refer to the statements that tell what really happened or what really is the case. A fact can be proved or disproved with direct evidence. It is something known by historical case. Look at an example from Passage 2 in this unit:

> *For decades, California has epitomized America's economic strengths: technological excellence, artistic creativity, agricultural fecundity and an intrepid entrepreneurial spirit.* (Paragraph 1)

Opinions refer to the statements of belief, judgment or feeling. They show what someone thinks or feels about a subject or a fact. Solid opinions, of course, are based on facts. However, opinions are still somebody's view of something and are not facts themselves. For example:

> *California entered the recession early last year and is expected to lag behind the nation well into 2011.* (Paragraph 3)

But it is not always easy for us to distinguish opinion from facts. A writer often combines the two in such a way that we do not always notice where facts ends and opinion begins. When we have a mixture of fact and opinion in a single sentence, we must

decide whether the main point of the sentence is essentially fact or opinion. Sometimes an opinion is presented as if it were a fact. For example:

> *The current governor and a legislature divided have turned the state into a fiscal laughingstock.* (Paragraph 2)

Reading Passage 2

Death of the Californian Dream

For decades, California has epitomized America's economic strengths: technological excellence, artistic creativity, agricultural fecundity and an intrepid entrepreneurial spirit. Yet lately California has projected a grimmer vision of a politically divided, economically stagnant state.

California has returned from the dead before, most recently in the mid-1990s, but the odds that Golden State can reinvent itself again seem long. The current governor and a legislature divided have turned the state into a fiscal laughingstock. Meanwhile, more of its middle class migrates out while a large and undereducated underclass faces dim prospects. It sometimes seems the people running the state have little feel for the very things that constitute its essence—and could allow California to reinvent itself, and the American future, once again.

The facts at hand are pretty dreary. California entered the recession early last year and is expected to lag behind the nation well into 2011. Unemployment stands at roughly 10 percent. Not surprisingly, people are fleeing this disaster. Net out-migration has been growing every year since about 2003 and should reach well over 200,000 by 2011. This outflow would be far greater, not for the fact that many residents can't sell their homes and are essentially held prisoner by their mortgages.

For Californians, this recession has been driven by different elements than the early-1990s downturn, which was largely caused by external forces. The end of the Cold War stripped away hundreds of thousands of well-paid defense-related jobs.

This time around, the recession feels like a self-inflicted wound, the result of 'bubble dependency." First came the dotcom bubble, centered largely in the Bay Area. The fortunes made there created an enormous surge in wealth, but by 2001 that bust had punched a huge hole in the California budget.

Yet almost as soon as the Internet bubble had evaporated, a new one emerged in housing. As prices soared in coastal enclaves, people fled to the periphery, often buying homes far from traditional suburban job centers. At first, it seemed like a miraculous development: people cheered as their home's "value" increased 20 percent annually. For a time the whole California economy seemed to revolve around real-estate speculation, with upwards of 50 percent of all new jobs coming from growth in fields like real estate, construction and mortgage brokering. As a result, when the housing bubble burst, the state's huge real-estate economy evaporated almost overnight.

To many longtime California observers, the inability of the political, business and academic elites to adequately anticipate and address the state's persistent problems has been a source of consternation and wonderment. In my view, the key to understanding California's precipitous decline transcends terms like liberal or conservative, Democratic or Republican. The real culprit lies in the politics of narcissism.

(Adapted from *English Language Learning*, October 2009, written by Joel)

Notes

- **Californian Dream** 加利福尼亚梦，指在这块新大陆上能快速获得财富，原指 1849 年的淘金梦，加利福尼亚州因淘金热快速致富而闻名世界。
- **dotcom bubble** 互联网泡沫，指 1995 年至 2001 年间与资讯科技及互联网相关的投机泡沫事件。在欧美、亚洲多个股票市场中，互联网及资讯科技相关企业的股价高速上升，在 2000 年 3 月 10 日纳斯达克指数触及最高点时达到顶峰。

New Words

epitomize [ɪ'pɪtəmaɪz]
vt. to embody the essential characteristics of or be a typical example of 概括，集中体现

fecundity [fɪ'kʌndətɪ]
n. the state of being fertile; capable of producing offspring 多产，富饶，肥沃

grim [grɪm]
adj. unpleasant, depressing, and difficult to accept 严峻的，让人沮丧的，令人难以接受的

stagnant ['stægnənt]
adj. not growing or changing; without force or vitality 不发展的，不景气的

fiscal ['fɪskəl]
adj. involving financial matters 财政的，国库的

laughingstock ['lɑːfɪŋstɒk]
n. a victim of ridicule or pranks 受人嘲笑者，笑谈，笑料

periphery [pə'rɪfərɪ]
n. the outside boundary or surface of something 边缘，外围，边缘地带

culprit ['kʌlprɪt]
n. someone who perpetrates wrongdoing 犯人，罪犯

Exercises

Questions 22—27

*Do the following statements agree with the information given in the passage? In brackets **22–27**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

22. (   ) The current government takes responsibility for Californian recession.
23. (   ) The present recession results from "bubble dependency"—Internet bubble and housing bubble.
24. (   ) Rich people have to face the bust.
25. (   ) California itself can reinvent and represent the nation's economic strengths again.
26. (   ) The development of real estate was the miracle of Californian economy in the 1990s.
27. (   ) Californian residents are unwilling to sell their homes even if it is in recession.

Questions 28—31

*Choose the correct letter **A, B, C** or **D**. Write the correct letter in blanks **28–31**.*

28. California, as described in the passage, __________.
    A has ever represented America's economic strengths in the early 1990s
    B can represent America's economic strengths again
    C has ever well-known for its miraculous development of real estate before this recession comes
    D is estimated to reinvent from death again

29. According to the passage, what have ever been the symbols in recent American history?
    A Excellent technology and agricultural productivity.
    B Developed Internet and miraculous real estate.
    C Creative arts and courageous entrepreneurial spirit.
    D Both A and C

30. According to Paragraph 6, which one is true?
    A The prices of housing increased 20 percent in 2011.
    B Housing speculation can resolve Californian economy.
    C Housing bubble speeds up the death of Californian dream.
    D Housing bubble promotes the development of Californian economy.

31. What can be inferred from the passage?
    A The migration of Californian is the key to the decline.
    B The Narcissism of the politics is the key to the decline.
    C The inability of the politics is the external factor of the decline.
    D "Bubble dependency" is the internal factor of the decline.

28. __________ 29. __________ 30. __________ 31. __________

Questions 32—34

Translate the sentences from the passage into Chinese.

32. It sometimes seems the people running the state have little feel for the very things that constitute its essence—and could allow California to reinvent itself, and the American future, once again.

____

____

33. As prices soared in coastal enclaves, people fled to the periphery, often buying homes far from traditional suburban job centers.

____

____

34. To many longtime California observers, the inability of the political, business and academic elites to adequately anticipate and address the state's persistent problems has been a source of consternation and wonderment.

____

____

Reading Passage 3

Lee Kong Chian School of Medicine

Medicine has come a long way. Drugs, remedies, facilities, technologies… but what about the service?

Prof Martyn Partridge wants to bring the smiles back to the profession as he and his team prepare to open the Lee Kong Chian School of Medicine.

Join the good professor on his mission to create competent and caring doctors.

IS THIS YOU? Knowledge is power and you have the will to use it for good.

YOE'RE BRILLIANT, DETERMINED, SUPER CURIOUS ABOUT THE SCIENCE, and always thinking about ways to help people live happy, health lives. When somebody gets ill, you wish you could take the pain away and make that person happy again. And you believe that if you work hard enough you will have the power to do just that.

THE LEE KONG CHIAN SCHOOL IS THE PLACE FOR YOU. You'll learn medicine from some of the top doctors in the field and each day at the school is guaranteed to inform and excite.

FORMED THROUGH A PARTNERSHIP BETWEEN NTU AND IMPERIAL COLLEGE LONDON, one of the world's top ten universities, the Lee Kong Chian School of Medicine is Singapore's newest medical school with a cutting-edge method of teaching medicine.

LESSONS WILL TAKE THE FORM OF E-LEARNING MODULES, like simulations, lectures, seminars, apprenticeships, and team-based and problem-based learning exercises, all of which will make each day at med-school infinitely stimulating.

AND ALL THIS IS GEARED TOWARDS CREATING DOCTORS who have an excellent grasp of medical science and are able to translate this knowledge into the kind of care that you and I would like to receive from a doctor.

BUT IT WON'T ALL JUST BE ABOUT MOLECULES AND CELLS AND THE ETIOLOGY OF DISEASES. The school also wants to produce graduates who can blend their scientific knowledge with technological know-how and be able to lead and work within healthcare teams of the future.

(Adapted from *HEY*, March-April 2012, anonymous)

Notes

- **Lee Kong Chian School of Medicine** 李光前医学院，是由新加坡南洋理工大学与伦敦帝国学院合作创办的一所医学院。
- **Martyn Partridge** 马丁·帕特里奇，伦敦帝国理工学院呼吸系统教授，帝国理工学院南洋医学院高级副院长。

New Words

cutting-edge ['kʌtɪŋ'edʒ]
n. in accord with the most fashionable ideas or style 先锋地位，优势

apprenticeship [ə'prentɪsʃɪp]
n. the position of apprentice 学徒，学徒身份

etiology [ˌiːtɪ'ɒlədʒɪ]
n. the cause of a disease 病理学

Exercises

Questions 35—39

Complete the sentences below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*

35. The mission of Prof Partridge is to cultivate ____________ doctors.

36. Besides your brilliant and determination, you're required to be ____________ about the science.

37. The forms of teaching here will make each day ____________.

38. You're expected to have the ability to ____________ your scientific knowledge with technological know-how and ____________ in the future teams.

39. You will be outstanding for your grasping of ____________ and your ability to put ____________ into practice.

Unit 5

Section A

Reading Passage 1

Childhood Trauma Leaves Legacy of Brain Changes

A difficult reality for psychiatrists and counselors of child abuse is that young victims are at high risk of becoming offenders themselves one day, although it's unclear why. But now a team of behavioral geneticists in Switzerland report a possible reason: early psychological trauma may actually cause lasting changes in the brain that promote aggressive behavior in adulthood.

Writing this week *Translational Psychiatry*, the researchers describe a series of experiments conducted in rats that led them to that conclusion. Animals placed in traumatic, fear-inducing situations around the time of puberty show high and sustained levels of aggression later in life. And while rats cannot substitute for humans, the scared rats also showed changes in hormone levels, brain activity, and genetic expression that appear very similar to traits observed among troubled and unusually violent people.

The main implication of the research, says study co-author Carmen Sandi, is that it links two previously observed phenomena: the higher rate of aggression among those experiencing early-life stress, and the blunted activation of a brain region known as the orbitofrontal cortex among people with pathological aggression. Social learning, it seems, may not be the only thing that makes abused kids more likely to grow up aggressive.

"This is a key finding which highlights the importance of not only developing social programs and politics, but also of reinforcing research that could offer valid [medical] treatments for individuals that have been victimized early in life," says Sandi, the director of the Brain Mind Institute at Ecole Polytechnique Fédérale de Lausanne, in an email discussing the study. "We need to understand the neurobiological mechanisms to offer better solutions to break 'the cycle of violence.'"

In the study, Sandi and colleagues tested the rats for changes in specific regions of the brain following long periods of fear, and then tested a potential treatment to determine if it was possible to undo those brain changes.

They began by exposing about 40 pubescent male rats for a few minutes at a time over several days, to severe stress—which, for the rats was either the scent of a fox or being stranded on a brightly lit platform. Those rats immediately showed higher levels of stress hormones and later puberty onset than similar animals not exposed to those experiences.

As adults, the stressed rats showed greater aggression toward other males they met—even ones that were clearly not a threat because they were much smaller or even anesthetized. And the once-stressed animals also showed more signs of depression and anxiety, including a reduced interest in food, lower sociability, and a tendency to give up quickly when faced with a challenge.

Those behavioral changes were accompanied by neurobiological changes in the brain as well. Compared to normal rats, the once-fearful ones had higher levels of the hormone testosterone, which is linked to aggression. They also showed more activity in the amygdala, the part of the brain responsible for emotions such as fear and anxiety, and altered connectivity between the amygdala and a region of the brain involved in decision-making. These brain alterations were also correlated with enhanced expression of the gene for an enzyme known as monoamine oxidase A, or MAOA, providing the scientists with a potential way to reverse the effects of the early traumas. Indeed, treating the rats with an MAOA inhibitor helped to restore normal social behavior and reduce aggression in the formerly stressed animals.

It turns out that the MAOA gene is also related to aggressive behavior in people, and certain inherited variants of the gene have also been linked to aggressive tendencies. Because the new study showed that MAOA inhibitors were effective in treating pathological aggression in rats, Sandi says the findings might suggest a similar drug treatment for humans, too, to complement behavioral therapy.

"What we show in our study is that, regardless of the genetic background, exposure to early life trauma can on its own affect the expression levels of this molecule in the brain," Sandi says. "Our work is novel in many ways, particularly because it provides concrete neurobiological pathways that link early trauma with pathological aggression."

Why would early traumatic experiences carve permanent changes in the brain?

Evolutionarily, such brain changes may have helped us to survive a harsh and cruel environment, by keeping us on edge and ready to confront any possible threats, Sandi says. Today, however, those same changes may do more harm than good, leading some victims of abuse to slip into a vicious cycle, seeing threats where none exist, and overreacting to situations, often with violence. It's possible that some people may be genetically more sensitive to the changes triggered by painful experiences, and therefore more likely to benefit from treatments that can address those genetic differences. Better understanding of why vicious cycles of violence exist may help researchers to find ways to break them.

(Adapted from http://healthland.time.com/2013/01/16/childhood-trauma-leaves-legacy-of-brain-change, written by Laura Blue)

Notes

- **behavioral genetics** 行为遗传学，研究遗传学在生物行为方面的作用，为遗传学的分支学科。
- **orbitofrontal cortex** 眼窝前额皮质，位于大脑额叶的前额皮质区域内，主管决策的认知过程。鉴于其在情感与奖励方面的功能，一些科研人员认为眼窝前额皮质是大脑边缘系统的一个组成部分。
- **testosterone** 睾丸素，是来自于雄性激素组里的一种甾类激素，存在于哺乳动物、爬行动物、鸟类和其他脊椎动物体内。在哺乳动物的肾上腺中存有少量睾丸素，但大多数是存在于雄性的睾丸和雌性的卵巢中。
- **amygdala** 大脑杏仁核，是高等脊椎动物脑内中一组杏仁形状的胞核，位于大脑内颞叶内部。研究证明其在记忆和情感反应过程起着主要作用，为大脑边缘系统的一部分。
- **monoamine oxidase A (MAOA)** 单胺氧化酶 A，是存在于人体内并由单胺氧化酶 A 基因编码的一种酶。单胺氧化酶抑制剂，即含有单胺氧化酶 A 和单胺氧化酶 B 的抑制剂，常被用于临床治疗抑郁症和焦虑症。

New Words

trauma ['trɔːmə]
n. an emotional wound or shock often having long-lasting effects 创伤（由心理创伤造成精神上的异常），损伤，痛苦经历

psychiatrist [saɪ'kaɪətrɪst]
n. a physician who specializes in psychiatry 精神病专家，精神病医生

counselor ['kaʊnsələ]
n. some who gives advice about problems 顾问，律师，（协助学生解决问题的）指导老师

puberty ['pju:bətɪ]
n. the time of life when sex glands become functional 青春期，开花期

hormone ['hɔ:məʊn]
n. the secretion of an endocrine gland that is transmitted by the blood to the tissue on which it has a specific effect 荷尔蒙，激素

blunt [blʌnt]
adj. characterized by directness in manner or speech; without subtlety or evasion 钝的，直率的

cortex ['kɔ:teks]
n. the tissue forming the outer layer of an organ or structure in plant or animal 皮质，树皮，果皮

pathological [ˌpæθə'lɒdʒɪkl]
adj. caused by or evidencing a mentally disturbed condition 病理学的，由疾病引起的，病态的

victimize ['vɪktɪmaɪz]
vt. to make a victim of 使受害，使受骗，使牺牲

pubescent [pju:'besnt]
adj. (of animals especially human beings) having arrived at the onset of puberty (the age at which sex glands become functional) but not yet fully mature 思春期的

strand [strænd]
n. a very slender natural or synthetic fiber（思想等的）一个组成部分

anesthetize [ə'nesθətaɪz]
vt. to make unconscious by means of anesthetic drugs 使麻醉，使麻木

enzyme ['enzaɪm]
n. any of several complex proteins that are produced by cells and act as catalysts in specific biochemical reactions 酶

inhibitor [ɪn'hɪbɪtə]
n. a substance that retards or stops an activity 抑制剂，抗老化剂

evolutionarily [ˌɪ:vəˌlu:ʃən'ærɪlɪ]
adv. of or relating to or produced by evolution 演化地，演进地

vicious ['vɪʃəs]
adj. having the nature of vice 邪恶的，恶毒的，凶猛的

overreact [ˌəʊvərɪ'ækt]
vi. to show an exaggerated response 反应过火

Text Analysis

This passage introduces one possible explanation for offensive behavior in adulthood that early psychological trauma may lead to lasting changes in brain. It is made up of four parts.

Part one is the very first paragraph. It makes the topic of the passage clear: early psychological trauma may actually cause lasting changes in the brain that promote aggressive behavior in adulthood.

Part two consists of three paragraphs: Paragraph 2 to Paragraph 4. All the paragraphs contain more details about the conclusion revealed by the researchers. Paragraph 2 points out animals placed in traumatic, fear-inducing situations around the time of puberty show high and sustained levels of aggression later in life. Paragraph 3 concludes social learning may not be the only thing that makes abused kids more likely to grow up aggressive. In Paragraph 4, Sandi believes the implication of the finding also attaches importance to the research that could offer valid treatments for individuals that have been victimized early in life.

Part three is made up of six paragraphs: Paragraphs 5 to 10, which shows how the researchers conducted the experiments. Paragraph 5 informs that the researchers tested rats to explore brain changes and a potential treatment for those changes. Paragraph 6 presents the test result: pubescent rats who suffered severe stress tended to have higher levels of stress hormones and later puberty onset than similar animals not exposed to those experiences. Paragraph 7 suggests when the stressed rats grew up, they showed greater aggression toward other males and more signs of depression and anxiety. Paragraph 8 demonstrates those behavioral changes were accompanied by neurobiological changes in the brain. Paragraph 9 is about MAOA gene, as well as its certain inherited variants, which is related to aggressive behavior. Paragraph 10 tells us that the study indicated the link between early trauma and pathological aggression.

Part four is the last paragraph, which summarizes better understanding of why early traumatic experiences carve permanent changes in the brain may help researchers to find ways to cope with it.

Prefixes and Suffixes

prefix: sus-

表示“在……下面”

同缀词：

suspend	*v.*	悬挂，中止
sustenance	*n.*	生活资料，粮食
susceptive	*adj.*	有接受力的

根据词缀猜下列词的词义：

1. susceptible	*adj.*	________
2. suspire	*v.*	________
3. suspect	*v.*	________
4. sustain	*v.*	________

suffix: -ism

(1) 表示“具备某种性质”

(2) 表示“行为，现象，状态”

(3) 表示“疾病”

(4) 名词，表示“各种主义，宗教”

同缀词：

tourism	*n.*	旅游业
humanism	*n.*	人道主义
rheumatism	*n.*	风湿病

根据词缀猜下列词的词义：

5. sexism	*n.*	________
6. socratism	*n.*	________
7. barbarism	*n.*	________
8. catholicism	*n.*	________
9. militarism	*n.*	________

suffix: -less

表形容词或副词，“无……的，不……的”

同缀词：

regardless	*adv.*	不顾一切地
effortless	*adj.*	不费力的
homeless	*adj.*	无家可归的

根据词缀猜下列词的词义：

10. nerveless	*adj.*	________
11. relentless	*adj.*	________
12. faultless	*adj.*	________
13. senseless	*adj.*	________
14. boundless	*adj.*	________

Synonyms

frank, open, plain, honest, sincere, straightforward
这些形容词均有“坦率，诚实”之意。

frank：强调毫无保留地畅所欲言，不受任何约束，即使伤害或攻击到他人。

open：强调诚实地向他人表露自己或公开自己的缺点，不隐瞒自己的秘密。

plain：强调直言不讳，毫不做作或故弄玄虚，即用简洁直接的语言表达自己的想法。

honest：指遵守正直等品德方面的道德准则。

sincere：指一个人发自内心地在言行上表达对某人某事的诚意。

straightforward：多用于答复、叙述等场合，直截了当，不回避。

Complete the following sentences with the proper form of the words listed above.

15. He was always ___________ about his drinking problem.
16. I would like to express my ___________ apologies for what I did.
17. The politician was completely ___________ about the problems that the government faced.
18. She was admired for her ___________ speaking.
19. Please give me a(n) ___________ answer on this problem.

permanent, eternal, perpetual, everlasting, endless
这些形容词均有“持久的，永久的”之意。

permanent：指总处于相同的情况和地位，并且长期持续下去，永久不变。

eternal：语气较庄重，侧重指永远存在，不会终止。

perpetual：语气最强，指保持永久不变，永无止境地持续下去。多用于贬义，指令人厌烦之事。

everlasting：语气较庄重，可与 eternal 互换，侧重指持续不尽，或指开始后一直进行下去。

endless：日常用词，侧重指无尽无休。有时用于贬义，指持续地询问或谈论某事，直至令人厌烦。

Complete the following sentences with the proper form of the words listed above.

20. Mother soon got tired of her ___________ demands for money.
21. The trip to France left a(n) ___________ impression on me.
22. The man asked ___________ questions about our home town.

23. We wish there were a(n) __________ friendship between the two countries.

24. She suffered __________ brain damage as a result of a car accident.

Exercises

Questions 1—4

*Choose the correct letter **A**, **B**, **C** or **D**. Write the correct letter in blanks **1—4**.*

1. Psychiatrists and counselors of child abuse always face the evidence that __________ .
   - A study on neurobiological mechanisms is the better way to break "the cycle of violence"
   - B early mental trauma may lead to temporary changes in the brain
   - C abused kids are likely to behave violently as they grow up
   - D animals in the stressful situations tend to be offensive in earlier life

2. According to the finding of the research, Carmen Sandi believes __________ .
   - A changes in hormone levels occurred to the scared rats, which is similar to aggressive people
   - B it's also significant to explore effective treatments for people who have suffered abuse in childhood
   - C social learning is the sole thing that makes young victims become aggressive
   - D the rate of aggression among those experiencing early-life stress will be increasingly higher

3. MAOA inhibitor has been revealed to __________ .
   - A be as the part of the brain which produces emotions
   - B change connectivity between the amygdala and a region of the brain responsible for decision-making
   - C help eliminate aggressive behavior
   - D play an important role in healing physical damages

4. Brain changes brought by early painful experiences __________ .
   - A have been influenced by the expression levels of this molecule in the brain
   - B can't help us adapt to difficult situations at all
   - C may do more good than harm
   - D often make some people aggressively respond to environment

1. __________ 2. __________ 3. __________ 4. __________

Questions 5—7

Complete the sentences below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*

5. Pubescent animals in long periods of fear appear to have high and __________ levels of aggression later in life.
6. Sandi's study showed that adult rats under lasting stress had __________ toward other male rats they encountered.
7. Some __________ of MAOA gene has been proved to be connected with aggression.

Questions 8—10

Translate the sentences from the passage into Chinese.

8. It's possible that some people may be genetically more sensitive to the changes triggered by painful experiences, and therefore more likely to benefit from treatments that can address those genetic differences.

____

____

9. The once-stressed animals also showed more signs of depression and anxiety, including a reduced interest in food, lower sociability, and a tendency to give up quickly when faced with a challenge.

____

____

10. Because the new study showed that MAOA inhibitors were effective in treating pathological aggression in rats, Sandi says the findings might suggest a similar drug treatment for humans, too, to complement behavioral therapy.

____

____

Section B

Reading Skills

Scanning

It is a very effective way to improve your comprehension that you scan a passage as

you can keep your mind active. To scan the content of a passage, you must read very carefully the subject, the paragraph headings, the first sentence of a paragraph, or just part of the first sentence to get enough information. Thus, to scan is to read quickly in order to locate or determine the place where the specific information is offered. The skill is particularly helpful in reading newspapers or magazines. The steps involved in scanning are as follows:

1. Decide what information you are searching for, and think about the form it may take.
2. Decide where you can look to find the item of information you want.
3. Move your eyes as quickly as possible down the page seeking specific words and phrases until you find them.

Here is an example from Passage 1 in this unit that may demonstrate how we possibly scan for some particular information. Having read the beginning of the first paragraph, we know psychiatrists and counselors always face a difficult reality that young victims are very likely to become offenders, but the reason is unknown. Immediately the question coming into our mind is probably "what can be the possible reason for it?" With this question in mind, we move our eyes quickly on, and soon we have the answer in the next sentences.

> *A team of behavioral geneticists in Switzerland report a possible reason: early psychological trauma may actually cause lasting changes in the brain that promote aggressive behavior in adulthood. (Paragraph 1)*

Reading Passage 2

Listen to Your Body

Ever wonder why, no matter how hard you try, you can't be one of those exercisers who jog 5km every dawn.

Stop blaming yourself. It's not because you lack discipline, it's because your body isn't programmed to work out at that hour.

According to a recent report by the *Wall Street Journal* website, a growing number of research suggests that we should pay more attention to our body clock when we make daily plans.

Our body clock, or natural body rhythm, influences our energy and alertness. Paying attention to it can help us pinpoint the different times of day when we best perform specific tasks—from thinking creatively to exercising.

The reality, however, is that most of us organize their time around work demands, school deadlines, commuting or social events. Doing whatever your

body feels like doing is a luxury in today's fast-paced modern society.

But that doesn't mean it isn't worth trying. Obeying our body clock has significant health benefits. Disrupting our natural body rhythm, on the other hand, has been linked to problems such as depression and obesity, says Steve Key, a biology professor at the University of Southern California.

When the body clock can synchronize the rhythms of its natural processes in response to light and other natural influences, it "gives us an edge in daily life", says Kay. According to him, when it comes to cognitive work, most adults perform best in the late morning. As our body temperature starts to rise just before awakening in the morning and continues to increase until midday, our memory, alertness and concentration gradually improve.

However, our ability to concentrate typically starts to diminish soon thereafter. Most of us are more easily distracted between noon and 4 pm.

Alertness also tends to fall after eating a meal and sleepiness tends to peak around 2 pm, making that a good time for a nap.

Surprisingly, tiredness may boost our creative powers. For most adults, problems that require open-ended thinking are often best tackled in the evening when they are tired, according to a study in the journal *Thinking & Reasoning*. This is because tiredness allows the mind to wander more freely to explore alternative solutions.

When choosing a time of day to exercise, paying attention to your body clock can improve results. Physical performance is usually best, and the risk of injury least, from about 3 to 6 pm, says Michael Smolensky, a professor of biomedical engineering at the University of Texas. Muscle strength tends to peak between 2 and 6 pm. And joints and muscles are as much as 20 percent more flexible in the evening, lowering the risk of injury, according to Smolensky.

Another boost for physical strength comes from the lungs, which function 17.6 percent more efficiently at 5 pm than at midday.

Of course, not everyone's body clock is the same, making it even harder to synchronize natural rhythms with daily plans. But research shows that if people don't follow a typical body clock, they operate on either of two distinctive patterns: Morning people tend to wake up and go to sleep earlier and to be most productive early in the day. Evening people tend to wake up later, start more slowly and peak in the evening.

(Adapted from http://www.i21st.cn/story/1654.html, anonymous)

Notes

- ***Wall Street Journal***《华尔街报》，一家报道商业与经济新闻的美国英文国际日报，由位于纽约的道琼斯公司（美国新闻集团的分支）出版发行。

New Words

pinpoint ['pɪnpɔɪnt]
vt. to locate exactly 确定，准确地指出，精准定位

obesity [əʊ'biːsɪtiː]
n. more than average fatness 肥胖，肥胖症

synchronize ['sɪŋkrənaɪz]
vt. to make synchronous and adjust in time or manner 使同步，使同时

cognitive ['kɒgnɪtɪv]
adj. of or being or relating to or involving cognition 认知的，认识的

Exercises

Questions 11–17

*Choose the correct time span for the following events from the list of time spans below. Write the correct letter, **A–G** in blanks **11–17**.*

List of Time Spans

A from about 3 to 6 pm	**B** between noon and 4 pm
C at 5 pm	**D** in the evening
E in the late morning	**F** between 2 and 6 pm
G around 2 pm	

11. The power of muscle goes to a climax.
12. It's suitable for people to have a doze.
13. The majority of adults can do cognitive work very well.
14. The lung works with higher efficiency.
15. Most people hardly concentrate their attention.
16. It's appropriate to do workouts.
17. Questions that need open-ended thinking can be most successfully handled.

11. ________ 12. ________ 13. ________ 14. ________

15. ________ 16. ________ 17. ________

Questions 18—20

Complete the sentences below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*

18. People can ________ best times of a day to do particular jobs in terms of body clock.

19. Some healthy problems would probably arise once our inner clock has been ________ .

20. Creativity can be motivated by tiredness which enables our mind to find out ________ .

Questions 21—23

Translate the sentences from the passage into Chinese.

21. The reality, however, is that most of us organize their time around work demands, school deadlines, commuting or social events. Doing whatever your body feels like doing is a luxury in today's fast-paced modern society.

____

____

22. As our body temperature starts to rise just before awakening in the morning and continues to increase until midday, our memory, alertness and concentration gradually improve.

____

____

23. But research shows that if people don't follow a typical body clock, they operate on either of two distinctive patterns: Morning people tend to wake up and go to sleep earlier and to be most productive early in the day. Evening people tend to wake up later, start more slowly and peak in the evening.

____

____

Reading Passage 3

First-time Travel? Lonely Planet Helps You!

There's perhaps only one thing better than traveling to a place for the first time—going there for a second round.

Lonely Planet has a bucket load of advice for first-timers but one of the best spots for know-how is our favorite and most vocal resource: other travelers on the Thorn Tree forum. They've got advice on what to do if it's your first time in Japan or Cuba or Chester or Scandinavia. But some advice is consistent, no matter which country you're traveling to. Here are some of the lessons they've learned the hard way (so you don't have to). The number one reminder for first-timers on Thorn Tree is:

Don't try and cram in too much. No really.

It's natural to want to make the most of a first visit—there's always that little voice warning you might not be back, so you'd better see everything you possibly can. But if you try to tick off too many boxes and cover too much ground, you'll end up frustrated, exhausted, and chances are you won't really be absorbing anything around you. Remember to slow down, take a breath, and smell the first-timer roses. Consider it a first date. You wouldn't be going unless you were interested, so take your time, get to know your date and experiment with your chemistry. Here are the other general travel tips that our community suggests, that can apply to almost anywhere you're headed.

Do your homework and share it.

Research your trip on the web. Get some great guidebooks. Talk to friends who've been there. Post your questions on Thorn Tree. Learn what you can about where you might like to go before you go, and you minimize the risk of feeling rushed or that you've missed out on something you would have loved. If you have an itinerary and a plan, run them by someone who's been to that place to see if it sounds doable.

Get your bearings.

Take a tour around the area—walking or biking if available. If there's public transport, ride it around to see where it goes. Find a slow way to get a sense of where you are, with the help of a local or a guide if possible. There are a lot of wonderful tour options out there that can be the perfect way to meet a new destination. Once you have your sampler, then you can decide where to take a bigger bite.

Plan to get lost.

Make sure you leave time in your itinerary and day-to-day schedule to wander and wonder. Giving yourself time and permission to get lost means you'll be free to discover hidden gems and sights that aren't on your map. Leave time to explore, strike up conversations, and lose yourself in the experience. Many

travelers report that getting lost ended up leading them to a highlight of their trip they otherwise would have missed.

Challenge yourself.

You know your comfort zones. You might be the adventurous type, or you might be traveling alone for the first time and everything seems pretty intimidating. Stretch yourself a little, based on what feels comfortable. Try your hand at some local words and phrases. Sample some food that might be exotic to your palate. Give yourself a gentle shock to the system and you're on your way to a unique, memorable adventure for your tastes.

(Adapted from http://www.lonelyplanet.com/north-america/travel-tips-and-articles/76425, written by Venessa Paech)

Notes

- **Lonely Planet** 孤独星球，全球最大的旅游指南出版商。截至 2010 年，它已出版大约 500 种的旅游指南，被翻译成 8 种语言，同时，它还制作了多个电视节目、手机应用程序及网站。
- **Chester** 切斯特，英国城市，位于英格兰西北部。
- **Scandinavia** 斯堪的纳维亚地区，位于欧洲北部，是一个有着明显历史语言文化特征的地区。主要包括丹麦、挪威、瑞典等国家。

New Words

vocal ['vəʊkl]
adj. relating to or designed for or using the singing voice 声音的，嗓音的

itinerary [aɪ'tɪnərərɪ]
n. an established line of travel or access 旅程，路线，旅行日程

doable ['du:əbl]
adj. possible to do 可做的，可行的

intimidating [ɪn'tɪmɪdeɪtɪŋ]
adj. discouraging through fear 吓人的

exotic [ɪg'zɒtɪk]
adj. strikingly strange or unusual 异国的，外来的

Phrases and Expressions

tick off	用记号勾出，列举
strike up	开始（交谈），建立起（友谊等）

Exercises

Questions 24—31

*Complete the summary using the list of words below. Write the correct letter, **A—L**, in blanks **24—31**.*

List of Words			
A exotic	**B** miss	**C** happy	**D** consistent
E be lost	**F** highlight	**G** interest	**H** destination
I adventurous	**J** slow	**K** minimize	**L** exhausted

Tips for First-time Travel

Advice is offered on the Thorn Tree forum for the first-time travelers, some of which is 24__________. First, if you try to pack everything into the travel plan, you'll feel 25__________ because it's unnecessary in the first visit. Learning well about the place before you go can help you 26__________ the feeling of being hurried and you won't 27__________ something you love. A 28__________ way can get you closer to the local place, and various tour choices will lead you to a new 29__________. Preparing to 30__________during the trip probably provides a good chance to experience unexpected surprises. To be a little more 31__________to challenge yourself may give you another unforgettable tour.

Questions 32—33

Translate the sentences from the passage into Chinese.

32. Leave time to explore, strike up conversations, and lose yourself in the experience. Many travelers report that getting lost ended up leading them to a highlight of their trip they otherwise would have missed.

____

____

33. Try your hand at some local words and phrases. Sample some food that might be exotic to your palate. Give yourself a gentle shock to the system and you're on your way to a unique, memorable adventure for your tastes.

____

____

Unit 6

Section A

Reading Passage 1

Pirate Heaven

There is a bay on the northern shore of Madagascar in whose thick forests, legend has it, lie the ruins of Libertalia. Some 300 years ago, the Indian Ocean was a favorite for European brigands who made their living on the high seas. But as Captain Charles Johnson recounts in his 1724 *A General History of the Robberies and Murders of the Most Notorious Pyrates*, piracy wasn't all rum and yo-ho-ho. Johnson portrays Libertalia's founders—James Misson, a former French navy officer, and Signor Caraccioli, a lapsed Italian priest who sailed with him—as revolutionaries. Caraccioli was something of a radical, and he convinced Misson and his crew "that every Man was born free, and had as much Right to what would support him as to the Air he respired... The vast Difference betwixt Man and Man, the one wallowing in Luxury, and the other in the most pinching Necessity, was owing only to Avarice and Ambition on the one Hand, and a pusillanimous Subjection on the other." Caraccioli persuaded the men to use robbery to punish the wealthy and buy their freedom. With their takings, they built a utopia on Madagascar in which a rotating leadership replaced kings and captains, religion had no hierarchy and private wealth was banned. Misson's crewmen, Caraccioli declared, "were no Pyrates, but Men who were resolved to assert that Liberty which God and Nature gave them [and] were Barriers against the Rich and Powerful."

Libertalia is most likely a myth. Its ruins have never been found, Misson himself may not have existed, and Charles Johnson is a pseudonym, perhaps Daniel Defoe's. But the legend contains elements of truth. In the 17th century, a band of English dissidents did establish a settlement in Ranter's Bay, on Madagascar, where they rejected organized religion and lived off piracy. Libertalia's founding ideals would also have been familiar to any 17th century rebel.

Libertalia holds lessons for those trying to end piracy today. To Misson's men,

piracy was a means to an end—fighting oppression and building a future of fairness and prosperity. Likewise, Somali pirates will often claim, as Fingers does, to be former fishermen who first attacked Asian fishing trawlers that were devastating Somali fish stocks. If that was once true, it isn't now: kidnapped crewmen report that many pirates can't swim, let alone sail, while the recovery in fish stocks engendered by piracy's deterrent effect has not been accompanied by a revival in the Somali fishing industry. Nevertheless, the notion that the world has dealt Somalis a cruel hand and that piracy will never be fixed unless some genuine Somali grievances are addressed is widely supported. "The only real solution is on land," says Graham Westgarth, chairman of the International Association of Independent Tanker Owners, a trade body.

It wouldn't take utopia. A more modest vision—a little less lawlessness, a little more development—has brought Omar Mohamoud Omarsuuri, a onetime IT teacher in Birmingham, in the U.K., back to the land of his birth. "The root cause of piracy is lack of strong authority onshore," says Omar. Despairing of a functioning national government, he and a selection of clan leaders have formed a regional one in a new state they have founded in central Somalia, Galmudug, at whose core is a new police force of 400 men. Omar hopes they will be the foundation of a state-level normalization that will lead eventually to legitimate businesses and legal jobs. Their initiative finds strong support from Somalis, even those linked to piracy. Adar Abdirahman, 40, is mother of Abduwali Abdukhadir Muse, who was sentenced to 33 years in jail in New York City in February for piracy. Adar says her son was just 15—"a child soldier"—when he became a pirate and 16 when he was arrested by a U.S. Special Operations team. "If you're going to tackle piracy, do it properly," she says, "not by arresting children but attacking the root cause: a failed state with no government, schools or jobs."

It's a brave project. But standing in its way, I can't help but feel, is Fingers. When I ask him if he's happy, he replies, "I am. I don't depend on anyone. When I want a woman, I give her money and she becomes my mistress. When I need a ship, I go out and take one. No one can stop me. The sea is as big as Somalia. No one can control Somalia. And no one controls the sea." Ending piracy will require building a better Somalia for tomorrow. Trouble is, Fingers and thousands like him are already living their Libertalia today.

(Adapted from *Time*, July 21, 2011, written by Alex Perry)

Notes

- **piracy in Somalia** 索马里海盗。索马里海盗自 1991 年索马里内战以来一直威胁到国际

海上运输业，阻碍了航海业的发展并增加了运输成本。

- **Madagascar** 马达加斯加岛，非洲岛国。
- **Libertalia** 李博塔利亚，传说 17 世纪晚期由马达加斯加海盗头领詹姆士·米森船长创建的一个无政府主义的殖民地。
- **Daniel Defoe** 丹尼尔·笛福，英国作家，新闻记者。英国启蒙时期现实主义小说的奠基人，被誉为“英国和欧洲小说之父”，其代表作为《鲁滨逊漂流记》。
- **Birmingham** 伯明翰，英国中部城市。

New Words

legend ['ledʒənd]
n. a very old and popular story that may be true 传说，传奇人物

brigand ['brɪgənd]
n. someone who attacks people and robs them, especially in mountains or forests 土匪，强盗

recount [rɪ'kaʊnt]
vt. to tell someone a story or describe a series of events 详细叙述，重新计算

portray [pɔː'treɪ]
vt. to describe or represent something or someone 描写，描绘

lapsed [læpst]
adj. no longer having the beliefs you had, especially religious beliefs 流失的，堕落的

respire [rɪ'spaɪə]
vt. to breathe 呼吸

betwixt [bɪ'twɪkst]
prep. (poetic or old use of) between [古] 在……中间

wallow ['wɒləʊ]
vi. to seem to enjoy being sad etc, especially because you get sympathy from other people 沉迷

pusillanimous [ˌpjuːsɪ'lænɪməs]
adj. frightened of taking even small risks 懦弱的，胆怯的

rotate [rəʊ'teɪt]
vi.&vt. to turn around a fixed point, or to make something do it（使某物）旋转

hierarchy ['haɪərɑːkɪ]
n. a system within an organization in which people have authority and control over the people in the rank below them, who then have authority over the people below them

分层，层次，等级制度

pseudonym ['sjuːdənɪm]
n. an invented name that a writer, artist etc. uses instead of his or her real name 假名，化名，（尤指）笔名

dissident ['dɪsɪdənt]
n. someone who publicly criticizes a government or political party, especially in a country where this is not allowed 持异议者，公开大唱反调者，持不同政见者

oppression [ə'preʃən]
n. the act of treating a group of people unfairly or cruelly, and preventing them from having the same rights that other people in society have 压迫

trawler ['traʊːlə]
n. a fishing boat that is used for trawling 拖网渔船

devastate ['devəsteɪt]
vt. to cause so much damage to a place or area that most of it is destroyed 破坏，毁灭

engender [ɪn'dʒendə]
vt. to (cause sth. to) occur 产生，引起

deterrent [dɪ'terənt]
adj. of something that makes someone less likely to do something 制止的，遏制的

legitimate [lɪ'dʒɪtɪmət]
adj. correct, allowable, or operating according to the law 合法的，正规的

mistress ['mɪstrɪs]
n. a woman that a man has a sexual relationship with even though he is married to someone else 情妇

Phrases and Expressions

wallow in	沉迷于……
live off	以……为生
a means to an end	达到目的的手段

Text Analysis

"Pirate Heaven" is taken from the Summer Journey Issue of *Time*. The theme of the issue is travels through Islam, guiding readers to discover a world of change and challenge in the Islam societies. "Pirate Heaven" is the last part of "Somalia's Sea Wolves", a short excerpt about Somalia's pirates.

The authors (Alex Perry and Galcayo) displayed a general picture of Somalia's piracy with a view to help readers form a basic understanding of the social phenomenon. Charles Johnson's accounts in 1724 about the legendary figures of Somalia piracy, their principles and the utopia established were quoted, which was compared with the statements and actions of present pirated on this land. The negative influence of piracy on fishing industry and social security was illustrated with words from relevant bodies as the root cause of confrontation between government on land founded by Omar in Gamudug and the authority on the sea led by Fingers.

The writing strategy of contrast is employed to develop this part. The general structure of this excerpt can be outlined with topic sentences as follows:

Contrast of legendary piracy of Libertalia with modern piracy

Paragraph 1 & 2: Johnson portrayed founders of Libertalia as revolutionaries, a land most likely a myth.

Paragraph 3: If that (fighting oppression and building a future of fairness and prosperity) was once true, it isn't now (in modern piracy).

Contrast of statements and actions between government on land and authority on the sea

Paragraph 4: It wouldn't take utopia. Omar and clan leaders have formed a regional one in a new state.

Paragraph 5: It is a brave project...Trouble is, Fingers and thousands like him are already living their Libertalia today.

Word Roots

spir 词根源于拉丁文 spirare（= to breathe 呼吸）

同根词：

spirit	*n.*	精神
dispirit	*v.*	使气馁，使沮丧
inspirit	*v.*	激励，鼓励
aspiration	*n.*	呼吸，渴望

根据词根词缀猜下列词的词义：

1. conspire	*v.*	________________
2. expire	*v.*	________________
3. inspire	*v.*	________________
4. perspire	*v.*	________________
5. suspire	*v.*	________________

6. transpire *v.* ______________

sid，sed，sess 词根源于拉丁文 sedere（= to sit 坐）

同根词：

preside	*v.*	作会议的主席，主持
reside	*v.*	居住
subside	*v.*	沉降，平息
assiduous	*adj.*	刻苦的，勤奋的

根据词根词缀猜下列词的词义：

7. supersede *v.* ______________
8. subsidy *n.* ______________
9. subsidiary *adj.* ______________
10. residue *n.* ______________
11. sedentary *adj.* ______________
12. sediment *n.* ______________

sper 词根源于拉丁文 sperare（= to hope 希望）

同根词：

desperate	*adj.*	绝望的，自暴自弃的
desperado	*n.*	亡命之徒，暴徒

根据词根词缀猜下列词的词义：

13. prosper *v.* ______________
14. despair *n.* ______________
15. despairing *adj.* ______________
16. prosperity *n.* ______________

Synonyms

back, uphold, support, sustain, advocate

back：通常指通过财政上或个人的影响来支持某人或某物；短语 back up 则指通过事实，论证来支持一观点或想法。

uphold：指捍卫或支持一法则，体系或原则而使其继续存在；（法律）一法庭坚持另一法庭的判决。

support：含义广泛，多指在道义上或物质上支持某人或某物，也可指支撑某物而不使其下落。

sustain：侧重指连续不断的支持，如持续支持某物存在，或

这些动词均有“支持，支援，拥护”之意。	维持某人或某物生存。另还可指忍受破坏、伤痛或金钱上的损失。 **advocate**：多指以写文章或发表演说等公开的方式来支持或拥护某事，往往暗示提倡某事或为某事辩护。

Complete the following sentences with the proper form of the words listed above.

17. The parameters within which life can be ____________ on Earth are extraordinarily narrow.

18. She is being ____________ by friends in her effort to surmount the tragedy.

19. Scientists ____________ a reduction in saturated fats in the human diet.

20. "The Declaration of Right ____________ the principle of hereditary monarchy" (Edmund Burke).

21. The corporation ____________ our candidate with a $1 000-a-plate dinner.

rotate, revolve, roll, spin, turn, whirl, circle 这些动词均有“转动，旋转”之意。	**rotate**：侧重指物体围绕自己的轴或中心旋转，即自转。可引申为一项工作轮换给不同的人去做。 **revolve**：强调指物体围绕本身以外的中心旋转，即公转。可引申为将某人或某物当作中心。 **roll**：指某物，尤指圆形的东西，在平面上滚动或翻滚。 **spin**：指沿内轴迅速而连续旋转，或沿外部一个点做快速圆周运转。可引申为头眩晕或某人用充满想象的方式讲述某事。 **turn**：普通用词，方向不确切，可指沿着一中心点或固定的点做圆周运动。可引申为身体的移动以便看见某物，或物体的转向。 **whirl**：指旋转或做圆周运动，侧重急速或力量。可引申为因内心充满想法而困惑或激动。 **circle**：指做圆周运动，尤指围绕某物做圆周运动。

Complete the following sentences with the proper form of the words listed above.

22. The earth ____________ round the sun.

23. Their troubles ____________ around money management.

24. The heavy blow sent the enemy ____________ to the ground.

25. The dancer ____________ across the stage.

26. The plane ____________, awaiting permission to land.

27. Interns will ____________ through the various departments.

28. Emily kept ____________ around her mother.

29. She ____________ over and propped herself up on her elbows.

30. ____________ this wheel will start the machine.

Exercises

Questions 1—6

Look at the following identities and the list of people below. Match each person listed in the box with the correct information of their identity.
Write the correct letter, ***A—F****, in blanks* ***1—6****.*

List of People

A Adar Abdirahman	**B** Charles Johnson
C Graham Westgarth	**D** James Misson
E Omar Mohamoud Omarsuuri	**F** Signor Caraccioli

1. A former French navy officer
2. A 40-years-old woman, whose son was sentenced to 33 years in jail in New York City for piracy
3. The author of *General History of the Robberies* and *Murders of the Most Notorious Pirates*
4. The chairman of a trade body called the International Association of Independent Tanker Owners
5. A person who once worked as an IT teacher in Birmingham, in the U.K.
6. An Italian priest sailing with James Mission

1. ________ 2. ________ 3. ________ 4. ________ 5. ________ 6. ________

Questions 7—10

Complete the sentences below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

7. To Mission followers, piracy was a way to achieve their aim of combating oppression and building a future of ____________.
8. Establishment of a ____________ , based on a police force, will definitely pave the way for legal business and legal jobs.

9. From the perspective of mother, eliminating ____________ , rather than arresting children is the proper way to crush piracy.

10. Developing a more prosperous Somalia for the future is a prerequisite for ____________ .

Questions 11–13

Translate the following sentences from the passage into Chinese.

11. Likewise, Somali pirates will often claim, as Fingers does, to be former fishermen who first attacked Asian fishing trawlers that were devastating Somali fish stocks.

____

____

12. If that was once true, it isn't now: kidnapped crewmen report that many pirates can't swim, let alone sail, while the recovery in fish stocks engendered by piracy's deterrent effect has not been accompanied by a revival in the Somali fishing industry.

____

____

13. Nevertheless, the notion that the world has dealt Somalis a cruel hand and that piracy will never be fixed unless some genuine Somali grievances are addressed is widely supported.

____

____

Section B

Reading Passage 2

Life After High School

"We've all wondered at times if high school determines who we become as adults, and now we have the empirical data to test that notion," says Pamela Herd, an associate professor of public affairs and sociology at the University of Wisconsin at Madison. Herd is the co-director of the Wisconsin Longitudinal Study, one of the largest and longest-running investigations of how lives unfold in high school and beyond. The study, funded by the National Institute

on Aging, has followed more than 10,000 members of Wisconsin's 1957 graduating class for more than 50 years, beginning when they were seniors and continuing through decades of establishing careers and raising families to their lives as retirees and grandparents.

The Wisconsin program is the granddaddy of a generation of studies that are just coming to fruition. They're being joined by a slew of shorter-term studies conducted by psychologists, sociologists, economists and epidemiologists, researchers from varied fields who have all taken an interest in the high school years. "Social scientists are realizing that many of our adult outcomes can be traced back, at least in part, to our experiences in high school," says Robert Crosnoe, a sociologist at the University of Texas at Austin and the author of *Fitting In, Standing Out*, a new book that draws on his seven-year study of the adolescent social scene.

It's not just the turbulent life stage of adolescence that has consequences for our later lives, Crosnoe stresses, but also the interactions of this developmental transition with the structures and hierarchies of high school. The institution has its origins in the secondary schools of the early 19th century, but it was only in the past 50 years or so—when high schools swelled as the children of the baby boom entered adolescence and youth culture took center stage—that our popular notion of high school took shape. Namely: high school as a formative life experience, as social as it is academic, in which students encounter a jostling bazaar of potential identities—from jock to prep to geek—and choose (or are assigned) one that will stay with them for years to come.

And yes, there's some truth to the yearbook predictions, social scientists find. Broadly speaking, the brainy grinds and the glad-handing class officers achieve success as adults. The jocks are fitter and in better health. The outcasts and dropouts are more likely to be depressed and unemployed. The kids who drank and smoked pot under the bleachers are mostly still drinking and doping, sometimes to excess.

But it may be time for a re-evaluation of many of our notions about what matters in high school, say researchers who study adolescence and its aftermath, including popularity and friendship, intelligence and hard work. For example, "popularity is not all it's cracked up to be," says Kathleen Boykin McElhaney, a psychologist at the University of Virginia. Her study of 164 adolescents, published in the journal Child Development in 2008, found that teenagers who don't belong to their schools' in groups can still function well socially—if they find a comfortable niche among their classmates. As long

as they feel happy with themselves and their friends, it doesn't matter how popular they are. "Our work shows that popularity isn't all that important," says McElhaney. "The key is finding a group of people with whom you can feel at ease being yourself."

Indeed, recent research suggests that popularity isn't entirely positive. Belonging to the cool crowd is associated with higher rates of drinking, drug use, sexual activity and minor delinquency during adolescence. And the connection between social status and risky behavior may be a lasting one: a study co-authored last year by Marlene J. Sandstrom, a professor of psychology at Williams College, reported that popularity in high school was associated with higher rates of substance abuse and sexual promiscuity in the three years after graduation.

What's more, popular kids may not even be well liked. Researchers distinguish between two types of popularity: "perceived popularity," or how socially prominent individuals are, and "sociometric popularity," or how well liked they are. Membership in the two groups often doesn't overlap. Sociometrically popular teens have a wide group of friends and are described by classmates as "trustworthy" and "kind;" perceived-popular students are admired and envied by their peers but are also regarded as "arrogant" and "stuck-up." And no wonder: many studies have linked perceived popularity to high levels of what researchers call "relational aggression": spreading gossip, engaging in taunting and bullying and practicing exclusion and the silent treatment in order to maintain one's social position.

If the populars don't have a lock on friendship, neither do the brains have an exclusive claim on post—high school success. In a study conducted last year, Stephen D. H. Hsu and James Schombert, physics professors at the University of Oregon, analyzed undergraduates' high school test scores and college grades. "Low SAT scores do not preclude high performance in most majors," they reported. High-achieving students often get that way through dogged effort, they pointed out, rather than innate brilliance. "Our results suggest that almost any student admitted to university can achieve academic success, if they work hard enough," the authors concluded.

Another study, by economists Jeffrey S. Zax and Daniel I. Rees of the University of Colorado, examined the connection between individuals' IQ and academic performance, measured in the last year of high school, and how much money they were making in their mid-30s and then in their early

50s. Using data from the Wisconsin Longitudinal Study, they concluded that "previous analyses have overstated the role of intelligence in economic success." Hard work and the development of capacities like conscientiousness and cooperation also matter for success—not to mention personal satisfaction and fulfillment. Coveted as they are in high school, brains and popularity get you only so far in the real world.

(Adapted from Time, June 20, 2011, written by Annie Murphy Paul)

Notes

- **SAT, Scholastic Assessment Test** 学术能力评估测试，由美国大学委员会（College Board）主办。SAT 成绩是世界各国高中生申请美国大学学习及奖学金的重要参考。

New Words

empirical [em'pɪrɪkəl]
adj. based on scientific testing or practical experience 凭经验的，以观察或实验为依据的

retiree [rɪˌtaɪə'riː]
n. someone who has stopped working, usually because of their age 退休者，退职者，退役者

fruition [frʊ'ɪʃən]
n. the successful result of a plan, idea etc. 成就，实现，结果实

epidemiologist [ˌepɪˌdiːmɪ'ɒlədʒɪst]
n. a medical scientist who studies the transmission and control of epidemic diseases 流行病学家

turbulent ['tɜːbjʊlənt]
adj. characterized by unrest or disorder or insubordination 骚乱的，混乱的

jostling ['dʒɒslɪŋ]
adj. the act of forcing the way by pushing 推挤的，竞争的

jock [dʒɒk]
n. an insulting word for someone who does a lot of sport 运动员

prep [prep]
n. a student at a preparatory school 大学预科生

geek [giːk]
n. a person with an unusual or odd personality 反常人，笨蛋，蠢货

brainy ['breɪnɪ]
adj. able to think quickly and learn easily 有头脑的，聪明的，多智的

glad-handing ['glædhændɪŋ]
adj. showing a warm welcome; may be insincere 过分热烈的

outcast ['aʊtkɑːst]
n. someone who is not accepted by the person they live among 被抛弃者，流浪的人，被驱逐的人

bleachers ['bliːtʃəs]
n. long wooden benches arranged in rows 露天看台

dope [dəʊp]
vi. to use drugs 吸毒，吸毒成瘾

niche [niːʃ]
n. a position particularly well suited to the person who occupies it 合适的位置

delinquency [dɪ'lɪŋkwənsɪ]
n. illegal or immoral behavior, especially by young people 不法行为，少年罪犯，过失

promiscuity [prɒmɪ'skjuːɪtɪ]
n. the act of having sex with a lot of people（男女的）乱交

sociometric [səʊsiːəʊ'metrɪk]
adj. based on a combination of social and economic conditions 社会经济的

stuck-up ['stʌk'ʌp]
adj. overly conceited or arrogant 高傲的，自大的，神气活现的

taunt [tɔːnt]
vt. to try to make someone angry or upset by saying unkind things or laughing at their faults or failures etc. 嘲笑，奚落，用嘲笑刺激

exclusion [ɪk'skluːʒən]
n. a situation in which someone or something is not allowed to take part in an activity, be a member of an organization etc. 排除，驱逐，被排斥在外的人（或事物）

preclude [prɪ'kluːd]
vt. to keep from happening or arising; make impossible 阻止，排除，妨碍

dogged ['dɒgɪd]
adj. very determined to continue doing something 顽强的，固执的

innate [ɪ'neɪt]
adj. present at birth but not necessarily hereditary; acquired during fetal development 天生的，特有的，直觉的

covet ['kʌvət]
vi.&vt. to have a very strong desire to have something that someone else has 贪求，觊觎

Phrases and Expressions

a slew of 许多，大量

Exercises

Questions 14—19

Look at the following opinions and the list of persons below. Match each opinion with the person(s) who expresses it.
*Write the correct letter, **A—F**, in blanks **14—19**.*

List of Persons

A Robert Crosnoe	**B** Annie Murphy Paul
C Marlene J. Sandstrom	**D** Kathleen Boykin McElhaney
E Stephen D. H. Hsu and James Schombert	
F Jeffrey S. Zax and Daniel I. Rees	

14. The role of intelligence in economic success has been exaggerated in previous analyses.
15. Popularity does not necessarily turn out to be what we think it should be.
16. Popularity in high school was linked with greater possibility of drug-taking and sexual promiscuity in the three years after graduation.
17. Students who achieve a lot in study acquire the fruition through hard work rather than inborn gifts.
18. Popularity is not so important, and what matters is finding a group where you can be yourself and get along well with its members.
19. Both the life stage of adolescence and the interaction of this developmental transition with the formations and hierarchy of high school have influences on students' later live.

14. ________ 15. ________ 16. ________ 17. ________ 18. ________ 19. ________

Questions 20—23

Complete the sentences below. Choose ***ONE WORD ONLY*** *from the passage for each answer.*

20. It is quite possible that those who drop out from school are depressed and ___________.

21. Being a member of the cool crowd suggests greater possibility of drinking, drug use, sexual activity and minor ___________ during adolescence.

22. Sociometrically popular teens have a wide group of friends and are described by classmates as "trustworthy" and ___________.

23. What also matter for success includes the development of capacities and hard ___________.

Questions 24—26

Translate the sentences from the passage into Chinese.

24. Social scientists are realizing that many of our adult outcomes can be traced back, at least in part, to our experiences in high school.

____

____

25. But it may be time for a re-evaluation of many of our notions about what matters in high school, say researchers who study adolescence and its aftermath, including popularity and friendship, intelligence and hard work.

____

____

26. And no wonder: many studies have linked perceived popularity to high levels of what researchers call "relational aggression": spreading gossip, engaging in taunting and bullying and practicing exclusion and the silent treatment in order to maintain one's social position.

____

____

Reading Passage 3

The Science of Righteousness

Evolution helps to explain why parties are so tribal and politics so divisive. Which of these two narratives most closely matches your political perspective?

A Once upon a time people lived in societies that were unequal and

oppressive, where the rich got richer and the poor got exploited. Chattel slavery, child labor, economic inequality, racism, sexism and discriminations of all types abounded until the liberal tradition of fairness, justice, care and equality brought about a free and fair society. And now conservatives want to turn back the clock in the name of greed and God.

B Once upon a time people lived in societies that embraced values and tradition, where people took personal responsibility, worked hard, enjoyed the fruits of their labor and through charity helped those in need. Marriage, family, faith, honor, loyalty, sanctity, and respect for authority and the rule of law brought about a free and fair society. But then liberals came along and destroyed everything in the name of "progress" and utopian social engineering.

C Although we may quibble over the details, political science research shows that the great majority of people fall on a left-right spectrum with these two grand narratives as bookends. And the story we tell about ourselves reflects the ancient tradition of "once upon a time things were bad, and now they're good thanks to our party" or "once upon a time things were good, but now they're bad thanks to the other party." So consistent are we in our beliefs that if you hew to the first narrative, I predict you read the *New York Times*, listen to progressive talk radio, watch CNN, are pro-choice and anti-gun, adhere to separation of church and state, are in favor of universal health care, and vote for measures to redistribute wealth and tax the rich. If you lean toward the second narrative, I predict you read the *Wall Street Journal*, listen to conservative talk radio, watch Fox News, are pro-life and anti–gun control, believe America is a Christian nation that should not ban religious expressions in the public sphere, are against universal health care, and vote against measures to redistribute wealth and tax the rich.

D Why are we so predictable and tribal in our politics? In his remarkably enlightening book, *The Righteous Mind: Why Good People Are Divided by Politics and Religion* (Pantheon, 2012), University of Virginia psychologist Jonathan Haidt argues that to both liberals and conservatives, members of the other party are not just wrong; they are righteously wrong—morally suspect and even dangerous. "Our righteous minds made it possible for human beings," Haidt argues, "to produce large cooperative groups, tribes, and nations without the glue of kinship. But at the same time, our righteous minds guarantee that our cooperative groups will always be cursed by moralistic strife." Thus, he shows, morality binds us together into

cohesive groups but blinds us to the ideas and motives of those in other groups.

E The evolutionary Rubicon that our species crossed hundreds of thousands of years ago that led to the moral hive mind was a result of "shared intentionality," which is "the ability to share mental representations of tasks that two or more of [our ancestors] were pursuing together. For example, while foraging, one person pulls down a branch while the other plucks the fruit, and they both share the meal." Chimps tend not to display this behavior, Haidt says, but "when early humans began to share intentions, their ability to hunt, gather, raise children, and raid their neighbors increased exponentially. Everyone on the team now had a mental representation of the task, knew that his or her partners shared the same representation, knew when a partner had acted in a way that impeded success or that hogged the spoils, and reacted negatively to such violations." Examples of modern political violations include Democrat John Kerry being accused of being a "flip-flopper" for changing his mind and Republican Mitt Romney declaring himself "severely conservative" when it was suggested he was wishy-washy in his party affiliation.

F Our dual moral nature leads Haidt to conclude that we need both liberals and conservatives in competition to reach a livable middle ground. As philosopher John Stuart Mill noted a century and a half ago: "A party of order or stability, and a party of progress or reform, are both necessary elements of a healthy state of political life."

(Adapted from *Scientific American*, June 7, 2012, written by Michael Shermer)

Notes

- ***New York Times*** **(NYT)**《纽约时报》
- **Cable News Network (CNN)** 美国有线电视新闻网
- **Fox News Channel (FNC)** 福克斯新闻频道
- **John Stuart Mill** 约翰·斯图亚特·穆勒，19 世纪英国哲学家，政治经济学家，在社会理论、政治理论以及政治经济等方面都极具影响力。

New Words

quibble ['kwɪbəl]
n. a small complaint or criticism about something very unimportant 吹毛求疵的反对意见或批评，遁词，模棱两可的话

spectrum ['spektrəm]
n. a complete range of opinions, ideas, situations etc., going from one extreme to its opposite 范围，幅度

pro-life ['prəʊ'laɪf]
adj. advocating full legal protection of embryos and fetuses (especially opposing the legalization of induced abortions) 反对人工流产合法化的，反堕胎的

kinship ['kɪnʃɪp]
n. relatedness or connection by blood or marriage or adoption 亲属关系

hive [haɪv]
n. a place where bees are kept 蜂箱

forage ['fɒrɪdʒ]
vt. to go around searching for food or other supplies 搜寻（食物），尤指动物觅（食）

hog [hɔːg]
n. a person who is greedy or eats too much 自私的或贪婪的人

wishy-washy ['wɪʃɪˌwɒʃɪ]
adj. a wishy-washy person does not seem to have clear ideas and seems unable to decide what they want 软弱无力的，空洞无聊的

Exercises

Questions 27—31

The passage has six paragraphs, ***A–F****. Which paragraph contains the following information?*
Write the correct letter, ***A–F****, in blanks* ***27–31****.*

27. Why some claim measures should be taken to control guns.

28. Birds of a feather flock together, people of a mind fall into the same group in the name of morality.

29. Why people are so divisive by politics.

30. Some tend to live in the societies full of inequality and oppression for the sake of religious reason.

31. Our ancestors had displayed the ability to share mental representations of tasks.

27. ________ 28. ________ 29. ________ 30. ________ 31. ________

Questions32—34

Complete the sentences below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*

32. Long before liberals preferred living in the societies that embraced ___________.

33. Without ___________, people still can cooperate with each other.

34. A livable middle ground needs ___________.

Questions 35—37

Translate the sentences from the passage into Chinese.

35. Once upon a time people lived in societies that embraced values and tradition, where people took personal responsibility, worked hard, enjoyed the fruits of their labor and through charity helped those in need.

____

____

36. Although we may quibble over the details, political science research shows that the great majority of people fall on a left-right spectrum with these two grand narratives as bookends.

____

____

37. Haidt argues that to both liberals and conservatives, members of the other party are not just wrong; they are righteously wrong—morally suspect and even dangerous.

____

____

Unit 7

Section A

Reading Passage 1

Methane Fever

An undersea methane explosion may have driven the most rapid warming episode of the past 90 million years.

Not often does a past geologic event exemplify what the actions of humanity may inflict on the world. Most global changes, such as the waxing and waning of ice ages, take so long that they are indiscernible in human lifetimes. But 55 million years ago a series of methane gas blasts may have choked the atmosphere with greenhouse gases at a pace similar to that at which the burning of fossil fuels pumps them into the air today.

Back then, at the end of an epoch of time known as the Paleocene, temperatures in the deep ocean soared by about six degrees Celsius. This worldwide heat wave killed off a plethora of microscopic deep-sea creatures and produced a bizarre spike in the record of carbon isotopes. Five years ago paleoceanographer Gerald ("Jerry") Dickens of James Cook University in Australia proposed that a belch of seafloor methane—a greenhouse gas with almost 30 times the heat trapping ability of carbon dioxide— caused the shock. But no one had actually seen evidence of where this catastrophe might have happened—until now.

Dickens, working with Miriam E. Katz of Rutgers University and two other researchers, recently discovered evidence of the exact sequence of predicted methane warming events buried under half a kilometer of sediment off Florida's northeastern coast. "It's the first really tangible evidence of methane release from that time," says marine geologist Timothy J. Bralower of the University of North Carolina at Chapel Hill. "It's almost too good to be true."

Katz, who helped to retrieve the prized seafloor sediment in 1997, was searching initially for the extinction. Some bottom-dwelling creatures called foraminifera, or forams, suffocated in the warmer water because it contains less oxygen than does

cold water. Their hard shells were eventually buried in the seafloor muck.

Staring through a microscope for hours at time, Katz painstakingly separated thousands of salt-grain-size forams from their muddy mass grave using a tiny paintbrush. Her search revealed that 55 percent of the species of deep-sea forams had disappeared from the fossil record in a blink of an eye in geologic time—less than 10,000 years within the late Paleocene climate fever. Katz's colleague Dorothy K. Pak of the University of California at Santa Barbara found that the shells of the surviving forams clearly recorded the carbon isotope spike.

Within the foram deathbeds, Katz was startled to notice a 25-centimeter-thick layer of jumbled chunks of mud. "At first I complained that it was messing up my extinction event," Katz says. Then she remembered Dickens's idea about what might have caused the creatures to die in the first place: An explosion of methane escapes from seafloor hydrate deposits where the gas, generated as bacteria digest dead plants and animals, lies entombed in crystalline cages of ice. The gas then bubbles to the ocean surface, enters the atmosphere and begins trapping the heat that eventually warms the ocean water and suffocates the forams.

Such an explosion would have likely triggered a seafloor landslide, and the jumbled mud layer looked like the smoking gun of just such an event. That's when Katz called Dickens into the project. He based his original methane escape scenario on the fact that methane hydrate deposits, which today contain something like 15 trillion tons of gas, are the only place where organic methane exists in abundances that could alter the isotopic signature of the foram shells. When Dickens and Katz searched for the landslide source, they found chaotic sediment layers just downhill from a buried coral reef—an ideal place for gas bubbles to have gathered before freezing into icy hydrates.

Still, not everything is solved. Richard D. Norris of the Woods Hole Oceanographic Institution notes that an abrupt change in deep-ocean currents, rather than exploding hydrates, could explain the landslide. And what caused the methane to come out in the first place is not clear. One possible trigger is the five-million-year warming trend that led up to the end of the Paleocene and had already poised the planet for dramatic change. When the bottom waters reached a critical temperature, the fragile hydrates may have decomposed in a sudden blast.

Even so, Katz says, it would have taken a series of such blasts to generate the nearly one trillion tons of gas that Dickens calculated would have been necessary to account for the isotope spike. But besides melting, hydrates have another, shorter way of going from the seafloor to the sky. On a research cruise off the

coast of Oregon last summer, Erwin Suess of the Research Center for Marine Geosciences in Kiel, Germany, and his colleagues saw refrigerator-size chunks of buoyant methane hydrate that had made a kilometer-long trip from the seafloor to the ocean surface before disintegrating.

A final question burns in Dickens's mind: "Once we get all of that carbon into the system, how do we get it out?" Understanding the consequences of the late Paleocene warming is crucial for the earth's current inhabitants. Even if we stopped driving our cars and burning coal in power plants today, Dickens says, the carbon dioxide that is already there would still have an impact down the line.

(Adapted from *Scientific American*, February 2000, written by Sarah Simpson)

Notes

- **methane** 甲烷，天然气的最主要成分，是一种很重要的燃料，同时也是一种温室气体，其全球变暖潜能为 21（即它的暖化能力比二氧化碳高 21 倍）。
- **Paleocene** 古新世，是地质时代中古近纪的第一个主要时期，大约开始于 6500 万年前，终于 5580 万年前。
- **Woods Hole Oceanographic Institution** 伍兹霍尔海洋研究所，一所专注于海洋科学与海洋工程的非营利私人研究和教学机构，成立于 1930 年，是美国最大的独立海洋学研究所。
- **Oregon** 俄勒冈州，位于美国西北的太平洋沿岸。
- **Kiel** 基尔，德意志联邦共和国北部港市。
- **marine geosciences** 海洋地球科学，是地质学与海洋学之间的交叉学科。

New Words

inflict [ɪn'flɪkt]
vt. to make someone suffer something unpleasant 使遭受

waning ['weɪnɪŋ]
adj. (of the moon) pertaining to the period during which the visible surface of the moon decreases（月亮）渐亏的

indiscernible [ˌɪndɪ'sɜːnəbəl]
adj. impossible to see or clearly distinguish 难辨认的，觉察不出的

epoch ['iːpɒk]
n. a perrod of time in history or a person's life, typically one marked by notable event or popular characteristics 纪元，时期

plethora ['pleθərə]

n. an excess of (something) 过多，过剩

microscopic [ˌmaɪkrə'skɒpɪk]
adj. so small as to be visible only with a microscope 显微镜的，微小的，细微的

bizarre [bɪ'zɑː]
adj. very strange or unusual, especially so as to cause interest or amusement 奇特的（指态度，容貌，款式等），奇怪的

spike [spaɪk]
n. a sharp increase in the magnitude or concentration of something 激增

isotope ['aɪsəˌtəʊp]
n. each of two or more forms of the same element that contain equal numbers of protons but different numbers of neutrons in their nuclei, and hence differ in relative atomic mass but not in chemical properties; in particular, a radioactive form of an element 同位素

belch [beltʃ]
n. an act of sending (smoke or flames) out or up 打嗝，嗳气，喷出物

catastrophe [kə'tæstrəfɪ]
n. an event causing great and often sudden damage or suffering; a disaster 大灾难，灾变

sediment ['sedɪmənt]
n. matter that settles to the bottom of a liquid; dregs 沉淀物，沉积物，沉渣

tangible ['tændʒəbl]
adj. clear and definite; real 明确的，真实的

retrieve [rɪ'triːv]
vt. to get (something) back; regain possession of 取回，恢复，重新得到

muck [mʌk]
n. dirt, rubbish, or waste matter 污物，污泥，废石，秽物

painstakingly ['peɪnsˌteɪkɪŋlɪ]
adv. in a fastidious and painstaking manner 刻苦地，精心，勤勤恳恳地

jumble ['dʒʌmbəl]
vt. to mix up in a confused or untidy way（使）混乱，杂乱

chunk [tʃʌŋk]
n. a thick, solid piece of something 厚厚的一块，（某物）相当大的数量或部分

hydrate ['haɪˌdreɪt]
n. a compound, typically a crystalline one, in which water molecules are chemically bound to another compound or an element 水合物

entomb [ɪn'tuːm]
vt. to bury or trap in or under something 埋葬，成为……的坟墓

crystalline ['krɪstəlɪn]
adj. having the structure and form of a crystal; composed of crystals 水晶的，似水晶的，结晶质的

trigger ['trɪgə]
n. an event or thing that causes something to happen 触发因素

scenario [sɪ'neəriːˌəʊ]
n. a postulated sequence or development of events 假想中的事态发展情况，（行动的）方案

poise [pɔɪz]
vt. to be or cause to be balanced or suspended 使平衡

decompose [ˌdiːkəm'pauz]
vt.&vi. (of a chemical compound) break down into component elements or simpler constituents 分解；（使）腐烂

buoyant ['bɔɪənt]
adj. able or tending to keep afloat or rise to the top of a liquid or gas 有浮力的，易浮的

disintegrate [dɪs'ɪntɪˌgreɪt]
vi.&vt. to break up into small parts, typically as the result of impact or decay（使）某物碎裂，崩裂，分崩离析

Phrases and Expressions

down the line 完全地，全部地

Text Analysis

The passage deals with a scientific research into methane fever of Paleocene. This passage can be broadly divided into three parts: Dickens proposed an idea based on a geologic event, the research work done by Dickens and his group, and the worry Dickens aroused about the green house gases.

The first part is made up of the first two paragraphs. Paragraph 1 informs us of a geologic event occurred in Paleocene, which may caused by methane gas, may have choked the atmosphere. Then Paragraph 2 gives a detailed description of the geologic event, and base on this event, Dickens put forward the methane warming explanation.

The second part is the biggest part of the passage, consisting of seven paragraphs, from Paragraph 3 to Paragraph 9. This part looks into the the research work Dickens and his group do to support his idea. Paragraph 3 reveals the evidence of methane warming—sediment, which was discovered by Dickens and his research group. Then, the next two paragraphs, Paragraphs 4 & 5, focus on the study of forams from the sediment undertaken by Katz, Dickens's research partner. Katz and her colleague found some evidence they want. Paragraphs 6 & 7 explore

a new evidence: Katz discovered a layer of jumbbled chunks of mud, which seemed to demonstrate Dickens's idea of methane explosion scenario. Paragraph 8 tells us that Richard D. Norris proposes a different explanation: an abrupt change in deep-ocean currents could cause the seafloor landslide. Paragraph 9 shows another possible way for methane going to the sky according to Erwin Suess and his colleagues' finding.

The third part is the last paragraph. It deals with Dickens's worry: the carbon dioxide exists in the sky would surely have an impact on the earth, even if we stop emitting it now.

Word Roots

em，empt 词根源于拉丁文 emere（= to take 取，to buy 买）

同根词：

exemplify	*vt.*	是……的典型，例示，举例证明
example	*n.*	例证，样本
exemplar	*n.*	范本，榜样
exempt	*adj.*	被免除的
	v.	免除

根据词根词缀猜下列词的词义：

1. preempt	*v.*	________________
2. prompt	*v.*	________________
3. promptitude	*n.*	________________
4. redeem	*v.*	________________
5. redemption	*n.*	________________
6. ransom	*n.*	________________

fract，frag 词根源于拉丁文 frangere（= to break 打破），过去分词是 fractus

同根词：

fragile	*adj.*	易碎的，脆的，虚弱的
fragility	*n.*	脆弱性，虚弱
fraction	*n.*	部分，微量；分数
fracture	*v.*	破裂，骨折
	n.	裂口；破裂
fragment	*n.*	碎片，断片
fragmentary	*adj.*	片断的，不完整的

根据词根词缀猜下列词的词义：

7. frail	*adj.*	________
8. diffract	*v.*	________
9. diffraction	*n.*	________
10. infract	*v.*	________
11. infraction	*n.*	________
12. suffrage	*n.*	________

pos 词根源于法文 poser（= to place, to set, to put 置，放）以及拉丁文 ponere（to place, to put），过去分词为 positus

同根词：

decompose	*vi. & vt.*	分解，（使）腐烂
compose	*v.*	构成，作曲，写作
composedly	*adv.*	镇定地，坦然自若地
composite	*adj.*	混合成的
	n.	合成物
compost	*n.*	混合肥料，混合物
composure	*n.*	冷静，沉着，镇定
position	*n.*	位置，姿势，职位

根据词根词缀猜下列词的词义：

13. posture	*n.*	________
14. apposite	*adj.*	________
15. depose	*v.*	________
16. deposit	*n.*	________
17. dispose	*v.*	________
18. expose	*v.*	________

Synonyms

famous, noted, prominent, notorious, eminent
这些形容词均含有“著名的，知名的”之意。

famous：是普通用词，指传播很广，引起人们注意的人或事物。

noted：多指因成绩卓著或某种特征而备受注意的专家或权威及其著作，有时含贬义。

prominent：指出人头地，为公众所熟悉。

notorious：指因劣迹而臭名昭著，含强烈贬义。

eminent：指在成绩，地位或特征上杰出卓越或突出的人或物。

Complete the following sentences with the proper form of the words listed above.

19. He is not ___________ for his sense of humor.

20. He is ___________ both as a sculptor and as a portrait painter.

21. The city is ___________ for its traffic jams.

22. Hainan is ___________ for its fresh air.

23. She is likely to play a ___________ part in the presidential campaign.

outstanding, noticeable, remarkable, conspicuous, striking
这些形容词均有“显著的，引人注意的”之意。

outstanding：通常指与同行或同类的人相比显得优秀或杰出，或具有他人或别的事物所没有的特征。

noticeable：指所描绘的事物容易被他人看见，听见或感知。

remarkable：通常指因有与众不同的特点或优越性而给他人留下深刻的印象或给人以惊讶。

conspicuous：通常指因成绩卓著，而引人注意，或指因外观奇特、花哨或言行举止不合常规而令人注意。

striking：侧重指某些不寻常的特征而引起观察者的兴趣或注意。

Complete the following sentences with the proper form of the words listed above.

24. If you are walking in a heavy rainy day, you'd better wear ___________ clothes.

25. It is ___________ that no one has complained about this system before.

26. The child's behavioral problems have become ___________.

27. Her eye make-up was very ___________.

28. This work is one of the ___________ examples of Indian art.

Exercises

Questions 1—6

*Do the following statements agree with the information given in the passage? In brackets **1—6**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1. (   ) Geologic changes such as waxing and waning of ice ages can be detected by human beings.

2. (   ) A spray of seafloor methane generated the heat that caused the death of some tiny deep-sea creatures.

3. (   ) Forams lived in the shallow sea wave before dying off.

4. (   ) Hard shells of forams were believed to be found in the seafloor sediment.

5. (   ) Katz easily removed forams from muddy mass grave through a microscope.

6. (   ) In Gerald Dicken's opinion, methane has generated before the age of Paleocene.

Questions 7—12

*Complete the sentences below. Choose **NO MORE THAN FOUR WORDS** from the passage for each answer.*

7. Dorothy K. Pak found the evidence of ____________ in the shells of surviving forams.
8. In Dickens' point of view, methane gas blast from ____________.
9. According to Dickens, methane gas is trapped in ____________ before it enters the atmosphere.
10. Methane hydrate deposits are the only site where numerous ____________ is found.
11. Erwin Suess and his colleagues saw chunks of buoyant methane hydrate that had traveled to the surface without ____________.
12. Even if we stopped the emission of greenhouse gases, the existing ____________ in the atmosphere would still have an influence on us.

Questions 13—14

Translate the sentences from the passage into Chinese.

13. Such an explosion would have likely triggered a seafloor landslide, and the jumbled mud layer looked like the smoking gun of just such an event.

____

____

14. One possible trigger is the five-million-year warming trend that led up to the end of the Paleocene and had already poised the planet for dramatic change.

____

____

Section B

Reading Passage 2

To Stretch or Not to Stretch

Is it time, once again, to stretch? For decades, many of us stretched before a workout, usually by reaching toward our toes or leaning against a wall to elongate our hamstrings, then holding that pose without moving until it felt uncomfortable, a technique known as static stretching. Most people, including scientists and entire generations of elementary-school P. E. teachers, believed that static stretching lengthened muscles and increased flexibility, making people better able to perform athletically.

But about 10 years ago, researchers began putting the practice to the test. They found that when athletes did static stretches, performance often suffered. Many couldn't jump as high, sprint as fast or swing a tennis racquet or golf club as powerfully as they could before they stretched. Static stretching appeared to cause the nervous system to react and tighten, not loosen, the stretched muscle, the research showed.

Not surprisingly, stretching fell out of favor among well-informed athletes and coaches. Last year, new exercise guidelines issued by the American College of Sports Medicine specifically advised against static stretching before workouts or competitions. The European College of Sport Sciences issued a position statement saying that such stretching could "diminish" athletic performance.

Which means, naturally, that static stretching is ripe for scientific reappraisal. And right on cue, several contrarian new reviews and studies suggest that static stretching may not be so bad after all—and may even be desirable.

For the most comprehensive, and bluntest, of the new reports, published this month in *Medicine & Science in Sports & Exercise*, researchers reviewed more than100 studies of stretching and concluded that the "detrimental effects of static stretch are mainly limited to longer duration" poses, meaning stretches that last for at least a minute. If you hold a particular stretch for a shorter period, the authors wrote, particularly stretch for less than 30 seconds, you should experience "no detrimental effect."

The other studies came to similar conclusions. A close reading of earlier studies, published in March in *The European Journal of Applied Physiology*, found that "a substantial number" of the experiments did not find "detrimental

effects associated with prior static stretching," especially if the stretches were "of short duration" or were stopped before "the point of discomfort." And a new study of well-trained female collegiate runners undertaken at Florida State University and published last month in *The Journal of Strength & Conditioning Research*, showed that a static stretching routine consisting of five leg-muscle stretches, each held for 30 seconds and repeated four times, "did not have an adverse effect" on the women's performance in a timed treadmill running test.

Of course, conclusions like "no detrimental effect" or "did not have an adverse effect" are not ringing endorsements of static stretching and prompt the obvious question: if brief stretches aren't bad for us, are they actively good? Should we, in other words, be making an effort to stretch before we exercise?

That question, most of today's stretching researchers say, remains difficult to answer. "Several studies have revealed that stretching," even of short duration, "increases the range of motion about a joint and reduces the stiffness of the muscle," Anthony Kay, a senior lecturer in sport and exercise biomechanics at the University of Northampton and the lead author of the latest review, told me. "Both of these," he explained, reduce "the risk of muscle strain injury," though muscle strains are not a top concern for many of us.

"Muscle strains are uncommon in activities such as jogging, cycling or swimming," said Malachy McHugh, the director of research at the Nicholas Institute of Sports Medicine and Athletic Trauma at Lenox Hill Hospital in New York, who has extensively studied stretching. Runners, swimmers and cyclists are more prone to overuse injuries, Dr. McHugh said, and the newest studies and reviews have not found that stretching reduces the risk of overuse injuries.

On the other hand, "if you are involved in a sport that demands a great extent of static flexibility," such as "holding a split position" during gymnastics or dropping into the ungainly crouch of "an ice hockey goalie," then "you may need to add some static stretching," said David Behm, the associate director of graduate studies and research at Memorial University of Newfoundland and lead author of the European Journal Review of stretching.

So there you have the state of the science on stretching. Hockey goalies, gymnasts, cheerleaders and dancers should be stretching before workouts or performances. The rest of us are unlikely, the latest findings show, to sustain any harm from brief spurts of static stretching—but equally unlikely to gain much advantage.

So if you stretch now before exercising and enjoy it, continue. "The negative psychological impact of altering precompetition routine may outweigh any possible benefit associated with removing" static stretching, the study of female runners concluded. But if you don't stretch, don't swear it. "I would

say there is no rationale" for most of us to practice "short duration static stretches." Dr. McHugh said.

(Adapted from *New York Times*, June 22, 2011, written by Gretchen Reynolds)

Notes

- **American College of Sports Medicine** (ACSM) 美国运动医学会，美国一家专业运动医学行业学会，成立于 1954 年，总部在美国印第安纳州波利斯市。它旨在通过运动科学、体育教育和医学领域先进的科学成果来促进和改善人类健康。运动是良药 (Exercise is medicine) 是 ACSM 的核心理念。
- **European College of Sport Sciences** 欧洲体育科学学院，非营利性机构，成立于 1995 年，总部在法国尼斯。它的目标是促进科学研究，特别关注运动科学与运动医学间的跨学科研究。
- ***Medicine & Science in Sports & Exercise***《美国体育运动医学杂志》
- ***The European Journal of Applied Physiology***《欧洲应用生理学杂志》
- ***The Journal of Strength & Conditioning Research***《力量和体能研究杂志》

New Words

workout ['wɜːkˌaʊt]
n. the train of the body by heavy physical exercise 锻炼，练习，试验

elongate [ɪ'lɔːŋˌgeɪt]
vt. to make long or longer by pulling and stretching 延长，加长

hamstring ['hæmstrɪŋ]
n. any of the five tendons at the back of the human knee 腿筋

sprint [sprɪnt]
vi. to run a short distance at full speed 冲刺，全速短跑

racquet ['rækɪt]
n. bat with a round or oval stringed frame, used for hitting the ball in tennis, badminton 球拍

well-informed ['welɪn'fɔːmd]
adj. having (access to) knowledge or information 消息灵通的，见多识广的，博识的

diminish [dɪ'mɪnɪʃ]
vi. & *vt.* to (cause something to) become smaller or less; decrease (使) 减少，缩小

reappraisal [ˌriːə'preɪzəl]
n. the examination of something again in order to consider whether you should change

your mind about it 再评价

contrarian [kən'treərɪən]
n. someone who deliberately decides to go against the prevailing wisdom of others 采取相反态度（或立场）者

detrimental [ˌdetrɪ'mentl]
adj. causing harm or damage 有害的，不利的

collegiate [kə'liːdʒɪɪt]
adj. of or resembling or typical of a college or college students 学院的，大学的，大学程度的

adverse ['ædvɜːs]
adj. not favorable 不利的，有害的，相反的

treadmill ['tredˌmɪl]
n. an exercise device consisting of an endless belt on which a person can walk or jog without changing place 踏车，（锻炼身体的）跑步机

endorsement [ɪn'dɔːsmənt]
n. formal support or approval for someone or something 担保，认可

stiffness ['stɪfnɪs]
n. the physical property of being inflexible and hard to bend 僵硬，强直，顽固

ungainly [ʌn'geɪnlɪː]
adj. lacking grace in movement or posture 难看的，不雅的，笨拙的

crouch [kraʊtʃ]
vi. to lower your body close to the ground by bending your knees completely 屈膝，蹲伏

hockey ['hɒkɪ]
n. a game played by two teams of 11 players each, with sticks and a ball 曲棍球

goalie ['gəʊlɪ]
n. the soccer or hockey player assigned to protect the goal 守门员

outweigh [aʊt'weɪ]
vt. to be more important or valuable than something else 在重量上超过，胜过，比……有价值

rationale [ˌræʃə'næl]
n. the reasons and principles on which a decision, plan, belief etc. is based 理论的说明，基本原理，基础理论

Phrases and Expressions

on cue	就在这个时候
prone to	倾向于

Exercises

Questions 15—18

*Do the following statements agree with the information given in passage? In brackets **15—18**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

15. (　　) For decades, some scientists accepted the idea that static stretching could raise athletic performance.

16. (　　) About a decade ago, researchers found that when athletes stretched for at least two minutes, they would hurt their muscle.

17. (　　) Athletes were not likely to do static stretches after learning that practice would do harm to their performance.

18. (　　) If you hold stretches for a long period, it will have no adverse effect.

Questions 19—23

Look at the following statements and the list of researchers below. Match each statement with the correct researcher(s).
*Write the correct letter, **A—C**, in blanks **19—23**.*
NB: You may use any letter more than once.

List of Researchers	
A	Anthony Kay
B	Malachy McHugh
C	David Behm

19. Stretching cannot reduce the risk of overuse injuries.

20. The disadvantages of changing the habit of stretching outweigh the advantages.

21. Static stretching can be beneficial in exercise that require static pliability.

22. When doing sports that are not intense, muscle strains rarely occur.

23. Stretching increases the flexibility of muscle.

19. ________ 20. ________ 21. ________ 22. ________ 23. ________

Questions 24—26

Translate the sentences from the passage into Chinese.

24. For decades, many of us stretched before a workout, usually by reaching toward our toes or leaning against a wall to elongate our hamstrings, then holding that pose without moving until it felt uncomfortable, a technique known as static stretching.

____

____

25. A close reading of earlier studies, published in March in *The European Journal of Applied Physiology*, found that "a substantial number" of the experiments did not find "detrimental effects associated with prior static stretching," especially if the stretches were "of short duration" or were stopped before "the point of discomfort."

____

____

26. Of course, conclusions like "no detrimental effect" or "did not have an adverse effect" are not ringing endorsements of static stretching and beg the obvious question: if brief stretches aren't bad for us, are they actively good?

____

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Reading Passage 3

Big Computers for Little Engineers

The key to reviving manufacturing in the U.S. may lie in the nation's supercomputers.

A The U.S. used to be a powerhouse in manufacturing. In the past quarter of a century we have relinquished this leadership position, in large part because we made a decision—consciously or unconsciously—that the service and financial sectors are sufficient to sustain our economy. But they are not.

Service jobs pay little. The financial industry makes nothing of value and therefore cannot maintain, let alone raise, the nation's standard of living.

B The fate of manufacturing is in some ways linked to our prowess in the physical sciences. In the 1960s and 1970s high-performance computing (HPC) developed at the national labs made its way to the manufacturing sector, where it now powers much of the innovation behind our most successful commercial firms. Yet we are ceding leadership in the physical sciences, too. Canceling the Superconducting Super Collider in the 1990s ended U.S. dominance in particle physics. NASA's decision to delay, and possibly eventually abandon, the Wide-Field Infrared Survey Telescope could do the same for cosmology.

C Fortunately, the nation's lead in high-performance computing still stands. HPC is the advanced computing physicists use to model the dynamics of black holes, meteorologists use to model weather and engineers use to simulate combustion. This expertise may also be our best chance to rescue U.S. manufacturing. If we can successfully deliver it to engineers at small firms, it might give the sector enough of a boost to compete with lower labor costs overseas.

D We already know how useful HPC is for big firms. When Boeing made the 767 in the 1980s, it tested 77 wing prototypes in the wind tunnel. When it made the 787 in 2005, it tested only 11. In the future, Boeing plans to bring that number down to three. Instead of physical wind tunnels, it uses virtual ones—simulations run on supercomputers—saving much time and money and quickening the pace of new products development. HPC modeling and simulation has become an equally powerful tool in designing assembly lines and manufacturing processes in a broad range of fields—big manufacturers such as Caterpillar, General Electric, Goodyear and Procter & Gamble use it routinely. Small manufacturers could get similar benefits from these tools, if only they had access to them.

E I first came to appreciate the potential of HPC to help small manufacturers in 2009 as part of the Obama transition team. Working with the Council on Competitiveness, we identified lack of software, cost of entry and shortages of expertise as the main obstacles to the use of HPC by small manufacturers and proposed a partnership among government, manufacturers and universities to help. The result is the National Digital Engineering and Manufacturing Consortium, or NDEMC, a pilot program created by the council and the federal government.

F Recently NDEMC made HPC resources available to a handful of firms, including Jeco Plastic Products. This 25-employee firm in Plainfield, Indiana, makes plastic pallets for packaging of auto parts. The plastic pallets are a less expensive alternative to steel pallets, which are heavier and prone to rusting. When Jeco makes a new product, its engineers build a prototype, test it in the lab to see how it bears up under the stress it is likely to encounter in the field and repeat the process until they arrive at the best design. Last December, however, Jeco engineers got a chance to tap expertise at Purdue University to develop simulations of a pallet designed for a German automotive company and ran them on hard ware at the Ohio Supercomputing Center in Columbus. As a result, Jeco bypassed that trial-and-error process completely, arriving at a design in only a few hours of computer time.

G Many other small firms could reap similar benefits. NDEMC's goal is to find the best business models for getting HPC to these firms and eventually take the effort nationwide. Small manufacturers today are in some ways like farmers at the beginning of the 20th century, most of whom did not know what contour farming, crop rotation and fertilizers could do for productivity. When the U.S. agricultural extension service, in conjunction with land grant universities, made the requisite expertise available, it triggered a revolution in agricultural productivity. A similar revolution could be in the cards for small manufacturers if we can get supercomputing technology into the hands of their engineers.

(Adapted from *Scientific American*, March 2012, written by Donald Q. Lamb)

Notes

- **High-performance computing** (HPC) 高性能计算
- **Superconducting Super Collider** 超导超大型加速器，是一座圆形粒子加速器。这一加速器原计划于 1980 年代建在美国得克萨斯州，周长为 87 公里，隧道位于地下 70 米，是一座使用超过一万个超导电磁铁的超大型研究设施。计划主持人为美国得州大学与哈佛大学的物理学家 Roy Schwitters。
- **Wide-Field Infrared Survey Telescope** 广域红外线巡天探测卫星，是 NASA 的红外线空间望远镜，于 2009 年 12 月 14 日发射。一般预期它一天可以发现数十颗小行星。它将拍摄太阳系、银河系以及宇宙深处的影像，增进对小行星、棕矮星和主要辐射红外线的星系的认识。
- **Boeing** 波音公司，是美国一家开发及生产飞机的公司，总部设于伊利诺伊州芝加哥，在航空业上拥有颇高的占有率。

- **Caterpillar** 卡特彼勒有限公司，是总部位于美国伊利诺伊州的重型工业设备制造公司。
- **General Electric** 通用电气公司，是美国一家提供技术和服务业务的跨国公司，总部位于康涅狄格州。
- **Goodyear** 固特异，总部位于美国俄亥俄州阿克伦的跨国轮胎与橡胶制品公司。该公司创立于 1898 年，为世界第三大轮胎制造商。
- **Procter & Gamble** 宝洁公司，简称 P&G，是一家美国消费日用品生产商，也是目前全球最大的日用品公司之一。总部位于美国俄亥俄州辛辛那提。
- **Obama transition team** 奥巴马过渡班子
- **Ohio Supercomputing Center** 俄亥俄州超级计算机中心

New Words

powerhouse ['paʊəˌhaʊs]
n. an organization or place that produces a lot of ideas and has a lot of influence 强大的集团或组织，身强力壮的人

relinquish [rɪ'lɪŋkwɪʃ]
vt. to let someone else have your power, position, or rights, especially unwillingly 放弃，让出（权利，财产等），松手

prowess ['praʊɪs]
n. great skill at doing something 英勇，高超技艺

innovation [ˌɪnəʊ'veɪʃən]
n. the introduction of new ideas or methods 改革，创新，新发明

cede [si:d]
vt. to give something such as an area of land or rights to a country or a person, especially when you are forced to 让给，割让，放弃

superconducting [ˌsju:pəkən'dʌktɪŋ]
adj. of a substance that allows electricity to flow through it very easily, especially at very low temperatures 超导（电）的，无电阻率的

collider [kə'laɪdə]
n. an accelerator in which two beams of particles are forced to collide head on 碰撞机

infrared ['ɪnfrə'red]
adj. infrared light gives out heat but cannot be seen 红外线的

cosmology [kɒz'mɒlədʒɪ]
n. the science of the origin and structure of the universe 宇宙学

meteorologist [ˌmiːtɪə'rɒlədʒɪst]
n. a specialist who studies processes in the earth's atmosphere that cause weather conditions 气象学者

simulate ['sɪmjuleɪt]
vt. to make or produce something that is not real but has the appearance of being real 模仿，模拟

combustion [kəm'bʌstʃən]
n. a process in which a substance reacts with oxygen to give heat and light 燃烧，氧化

expertise [ˌekspɜː'tiːz]
n. special skills or knowledge in a particular subject 专门知识或技能，鉴定

prototype ['prəʊtətaɪp]
n. the first form that a new design of a car, machine etc has 原型，雏形，蓝本

transition [træn'zɪʃən]
n. the act or process of changing from one form or state to another 过渡，转变

pallet ['pælɪt]
n. a portable platform for storing or moving goods that are stacked on it 托盘，平台

bypass ['baɪpɑːs]
vt. to go around or avoid something 走旁道以绕过或避开（某物）

contour ['kɒnˌtʊə]
vt. to form the shape of the outer edges of something 画轮廓（等高线）

rotation [rəʊ'teɪʃən]
n. the action of turning around a fixed point 轮流，轮作

Phrases and Expressions

a handful of	一把，少数，不多
bear up	支撑，支持住
land grant	政府拨给大学或铁路的土地，政府赠与地

Exercises

Questions 27—33

*The passage has seven paragraphs, **A–G**. Choose the correct heading for each paragraph from the list of headings below.*

*Write the correct number, **i–x**, in blanks **27–33**.*

List of Headings	
i	The creation of HPC
ii	HPC is helpful to big corporations
iii	HPC benefits small manufacturers via NDEMC
iv	The U.S. canceled the Superconducting Super Collider
v	NDEMC will bring promising revolution for small firms
vi	HPC can be used in cosmology
vii	The U.S. maintains its top position in HPC
viii	The U.S. has lost its leadership in manufacturing
ix	NDEMC's benefits, a case in point
x	The relationship between manufacturing and physical science

27. Paragraph **A** ____________
28. Paragraph **B** ____________
29. Paragraph **C** ____________
30. Paragraph **D** ____________
31. Paragraph **E** ____________
32. Paragraph **F** ____________
33. Paragraph **G** ____________

Questions 34–37

*Choose the correct letter **A, B, C** or **D**. Write the correct letter in blanks **34–37**.*

34. HPC can be used to ____________.
    A stimulate combustion
    B simulate weather
    C lower labour costs overseas
    D detect black hole

35. How can Boeing tests less wing prototypes in the wind tunnel by using HPC?
    A By using assembly lines.
    B By using physical wind tunels.
    C By manufacturing process.
    D By modelling wind tunnels.

36. NDEMC is created by ____________.
    A Obama transition team
    B small manufacturers
    C universities
    D the council and the federal government

37. Why did Jeco Plastic Products make plastic pallets as an option of steel ones?

A Because plastic pallets are more expensive.

B Because plastic pallets are lighter.

C Because steel pallets are more durable.

D Because steel pallets has a prototype.

34. ____________ 35. ____________ 36. ____________ 37. ____________

Questions 38—40

Translate the sentences from the passage into Chinese.

38. Canceling the Superconducting Super Collider in the 1990s ended U.S. dominance in particle physics.

____

____

39. HPC is the advanced computing physicists use to model the dynamics of black holes, meteorologists use to model weather and engineers use to simulate combustion.

____

____

40. When the U.S. agricultural extension service, in conjunction with land grant universities, made the requisite expertise available, it triggered a revolution in agricultural productivity.

____

____

Unit 8

Section A

Reading Passage 1

Envy

What has the world designed as enviable? At a certain level of generality, wealth, beauty, power, talent and skill, knowledge and wisdom, and extraordinary good luck come close to completing the list. (I'd add youth, more about which presently.) Some of these items are gifts received at birth; some are acquired at the expense of great effort. In the best of all worlds, one would be rich, beautiful, powerful, laden with talent, wise and learned, and (given the foregoing) obviously hugely fortunate. In the actual world, one is considered fairly lucky if in possession of any one of these items.

If one does have one or more than one of these enviable qualities, the chances are great that it is not that which one most wanted. I have never known a beautiful woman, for example, who didn't feel her beauty decisively flawed by some (usually) minuscule portion of her physique that she can't bear. ("Look at my ankles, for God's sake!") Unless this is envy speaking, most immensely handsome men turn out to be rather lunk-headed; perhaps their handsomeness has made it easier for them not to have to work overlong at cultivating their intelligence. The rich want to be beautiful or wish themselves wise; and the wise, if they really wise, know that the wisdom begins with the acknowledgement that one knows nothing, so, really, what the hell good is that.

F. Scott Fitzgerald said: "I didn't have the top two things, great animal magnetism or money. I had the second two things, though, good looks and intelligence." I don't believe Fitzgerald was an envious man—his false friend Ernest Hemingway, I believe, was deeply envious—but, as a fantast of sorts, Fitzgerald did know a vast deal about yearning. My guess is that, had he the money, he wouldn't have minded throwing those Long Island parties of Jay Gatsby's; and there is no doubt he would have loved having those delightful shirts. He may even have wanted to marry a

woman like Daisy Buchanan, formerly of Lake Forest, Illinois, a Daisy in a more kind-hearted version, of course. But as an artist, F. Scott Fitzgerald could, through the alchemy of art, transform his envy into yearning and then into art.

The rest of us are left to deal with our envy in less magical ways. Fortunately, for most of us our envy is small things and of brief duration. I see the grace and strength of a male ballet dancer and wish I could command something similar on my own. I read a book studded with brilliant insights set out in unblemished prose and wish I had had the thoughtfulness and craft to have written in myself. I go to lunch with three friends and when the main courses arrive, I see that I have ordered quite the poorest dish of the four of us at the table and, looking at theirs, I feel a stab of disappointment accompanied by what I call "entrée envy." But these are all fleeting feelings, as close to wistfulness as they are to true envy.

Helmut Schoeck in his book on envy makes the point that real envy is reserved not for the great or the greatly gifted, but for those whose situation seems only slightly better than ours. "Overwhelming and astounding inequality," he writes, "especially when it has an element of unattainable, arouses far less envy than minimal inequality, which inevitably causes the envious to think: 'I might have been in his place.'"

Among those things the world has judged enviable, perhaps only one comes close to garnering near universal agreement: youth. Even the most generous-hearted cannot, at times, help envying the young, if for nothing more complicated than the undeniable fact that the most important cards of life, the years, are stacked in their favor. I wouldn't want to be young again, one says, and yet to say it is probably to suggest, perhaps unbeknownst to oneself, one's fatigue with life.

Obviously, the young do not feel envious of youth—they find other things to envy: wealth, position, experience, power—but nearly everyone else who feels his or her own youth beginning to depart or entirely gone cannot look upon the glowing young without an accompanying sigh of yearning that easily enough melds into envy. Much of this envy of the young is of a general and harmless kind, but sometimes it can turn particular and quite poisonous.

Youth, it has almost too famously been said, is wasted on the young. And of course it is. If the young had the experience of the aged, they probably wouldn't have the pleasure in their youthfulness that being inexperienced brings. The cruel deal seems to be this: one is permitted all the physical gifts so long as one doesn't really know how to husband them; and one learns how to husband them only when these gifts have departed. The comedy of all comedies is herein played. God, we must

once more conclude, loves a joke.

(Adapted from *Envy*, published by Oxford University Press in 2003, written by Joseph Epstein)

Notes

- **F. Scott Fitzgerald** 弗·斯科特·菲茨杰拉德，美国 20 世纪早期杰出短篇小说家之一，代表作《了不起的盖茨比》。
- **Jay Gatsby** 杰伊·盖茨比，小说家菲茨杰拉德代表作《了不起的盖茨比》中主角人物，该角色在美国已成为靠白手起家而跻身上层社会美国男人的化身。

New Words

laden ['leɪdən]
adj. heavily loaded with something, or containing a lot of something 满载的，负载的，受压迫的

foregoing ['fɔːɡəʊɪŋ]
adj. used when referring to what has just been stated or mentioned 在前的，在先的，前面提到的

minuscule ['mɪnəskjuːl]
adj. very small 非常小的，极不重要的

physique [fɪ'ziːk]
n. the shape and size of human body 体格，体形

lunk [lʌŋk]
n. a silly person 呆子，笨蛋

fantast ['fæntæst]
n. someone who predicts the future 幻想家，梦想家

yearning ['jɜːnɪŋ]
n. a very strong desire for something 思念，渴望，向往

alchemy ['ælkɪmɪ]
n. a form of chemistry studied in the Middle Ages, which was concerned with trying to discover ways to change ordinary metals into gold 炼金术，炼丹术，（改变事物、物质的）魔力（或方法）

stud [stʌd]
vt. to attach small pieces of metal to a surface for decoration 用饰钮装饰

unblemished [ʌn'blemɪʃt]
adj. someone's record, reputation, or character not been harmed or spoiled（人的名声、

记录或性格）无污点的，完美无缺的，无瑕疵的

fleeting ['fliːtɪŋ]
adj. lasting only for a very short time 疾驰的，飞逝的，短暂的，稍纵即逝

wistfulness ['wɪstfəlnɪs]
n. sadness because you want something and know that you cannot have it 惆怅，渴望，思念

astounding [ə'staʊndɪŋ]
adj. bewildering or striking dumb with wonder 令人惊骇的

minimal ['mɪnɪməl]
adj. very small in quantity, value, or degree 最小的，极少的，极小的

garner ['gɑːnər]
vt. to collect or store 收集并（通常）贮藏（某物），取得，获得

unbeknownst ['ʌnbɪ'nəʊnst]
adj. being not known 未知的，不为人知的

meld [meld]
vi. &*vt.* to blend with something（使）融合，合并，结合

husband ['hʌzbənd]
vt. to be very careful in the way you use your money, supplies etc. and not to waste any 节俭地使用

herein [hɪər'ɪn]
adv. in this document, text, or book 此中，于此

Text Analysis

The passage is made up of four parts.

Part one is the very first paragraph. It makes a list of enviable things. One is considered fairly lucky if in possession of any one of these items such as wealth, beauty, talent, etc.

Part two consists of four paragraphs, from Paragraph 2 to Paragraph 5. It's about how people handle envy. Paragraph 2 is about how the envied people see their enviable qualities. If one does have one or more than one of these enviable qualities, the chances are great that it is not that which one most wanted. Paragraph 3 is about how F. Scott Fitzgerald dealt with envy. As an artist, he could transform his envy into yearning and then into art. Paragraph 4 is about how ordinary people handle their envy. For most of us, our envy is small things and of brief duration. Paragraph 5 quotes Helmut Schoeck's remark on envy. Real envy is reserved not for the great or the greatly gifted, but for those whose situation seems only slightly better than ours.

Part three is made up of two paragraphs, Paragraphs 6 & 7. This part discusses youth which most people believe to be enviable. Paragraph 6 introduces the idea that youth is universally agreed to be enviable. Paragraph 7 is about how the younger and older people see youth. The former do not feel envious of youth, while the latter often envy the young, though this envy is often harmless.

Part four is Paragraph 8. It makes a comment on envy. One is permitted all the physical gifts so long as one doesn't really know how to husband them; and one learns how to husband them only when these gifts have departed.

Word Roots

gener，gen，gent 词根源于拉丁文 generare（=to produce 制造，生产）

同根词：

generality	*n.*	一般性，通则，概论
generalize	*v.*	一般化，普通化
generate	*v.*	产生，发生，造成
generator	*n.*	发电机，生产者

根据词根词缀猜下列词的词义：

1. regenerate	*v.*	____________
2. generous	*adj.*	____________
3. genetics	*n.*	____________
4. congenial	*adj.*	____________
5. genial	*adj.*	____________
6. congenital	*adj.*	____________

dic，dict 词根源于拉丁文 dicare（=to speak 说话）

同根词：

abdicate	*v.*	放弃，退位
predict	*v.*	预测
edict	*n.*	法令，告示
verdict	*n.*	判决，裁决
dictionary	*n.*	字典
malediction	*n.*	诅咒，咒骂

根据词根词缀猜下列词的词义：

7. dictation	*n.*	________
8. indict	*v.*	________
9. addict	*v.*	________
10. predicate	*v.*	________
11. contradiction	*n.*	________
12. dedicate	*v.*	________

min 词根源于拉丁文 minutus (= small 小的)

同根词：

minimal	*adj.*	最小的
minuscule	*adj.*	非常小的，极不重要的
minify	*v.*	缩小
minim	*n.*	微小
minimum	*n.*	最低限度，极小
minor	*adj.*	较小的

根据词根词缀猜下列词的词义：

13. minus	*adj.*	________
14. minutia	*n.*	________
15. mince	*v.*	________
16. comminute	*v.*	________
17. diminish	*v.*	________
18. diminutive	*adj.*	________

Synonyms

author, writer
这两个名词均有“作者，作家”之意。

author：泛指用自己名字或笔名发表过作品的人，不强调是否以写作为主职业。

writer：含义广泛，一般指以写作为职业的人。

Complete the following sentences with the proper form of the words listed above.

19. The series was based on the autobiographies of the ________.

20. I have great admiration for her as a ________.

21. She never achieved her ambition of becoming a famous ___________.

22. The ___________ devotes the first three chapters to the subject.

business, occupation, profession, career, vocation, trade 这些名词均有“职业，工作”的意思。	**business**：使用广泛，在日常生活中，可泛指“事情”，尤指自己负责管理的事情；在社会经济生活中，多指生意，尤指以营利为目的的买卖或商业中的工作。 **occupation**：可以泛指各种专业。 **profession**：指必须受过相当高的教育或专门训练才能从事的知识性职业，如律师、医生、建筑师等。 **career**：侧重指某人从事一生的职业，如某人的职业生涯。 **vocation**：指专心从事的职业，除谋生的行业外，还包括因为有专业技术而从事该职业。 **trade:** 则是指涉及体力或手工劳动、手工操作机械或工具的职业。

Complete the following sentences with the proper form of the words listed above.

23. Her father discouraged her from going into the legal ___________.

24. Basket-weaving is a dying ___________.

25. Please give your name, address and ___________.

26. A lot of the U.S. small grocers have gone out of ___________ since the advent of the supermarkets.

27. You should be a teacher—you have missed your ___________, i.e. You are following the wrong ___________.

28. He had just started out on a ___________ as a writer.

sham, fake 这两个名词均表示“冒牌货”之意。	**sham**：指假装友好、认真或诚实，或指装成与实际情况不符的人。 **fake**：通常指为欺骗他人使某事看起来像真的一样，或生产出没有价值的冒牌货或代用品，特别是冒牌或替代一些价值贵重的东西。

Complete the following sentences with the proper form of the words listed above.

29. He can tell a ___________ from the original.

30. She claims to know all about computers but really she's a ___________.

Exercises

Questions 1—5

*Do the following statements agree with the information given in the passage? In brackets **1—5**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1. (　　　) In real life, one is regarded rather fortunate if he/she has any one of such items as wealth, beauty, power, talent, knowledge, wisdom and good luck.
2. (　　　) If a person has one or more than one of these enviable items, it is highly possible that it is the very thing he/she is most longing for.
3. (　　　) It was by means of the magical power of art that F. Scott Fitzgerald turned his envy into longing and then ultimately into art.
4. (　　　) For 70 percent of us, our envy is minor matters and doesn't last long.
5. (　　　) According to Helmut Schoek, the astonishing and great inequality causes much more envy than the smallest one.

Questions 6—10

*Choose the correct letter, **A, B, C**, or **D**. Write the correct letter in blanks **6—10**.*

6. The following items are created by the world as covetable EXCEPT ___________.

   A talent
   B beauty
   C love
   D wealth

7. If F. Scott Fitzgerald had the money, he would have ___________.

   A thrown away parties
   B enjoyed owning those pleasing shirts
   C married Daisy Buchanan
   D bought a good car

8. According to Helmut Schoeck, real envy is saved for ___________.

   A great men

B those born with many gifts

C those whose conditions are somewhat superior to others'

D the kind-hearted

9. By saying I wouldn't want to be young again, it is likely that one wants to express his/her ___________.

A anger

B regret

C tiredness with life

D satisfaction with life

10. If young people had the experience of the old, they would ___________.

A be wiser when dealing with others

B not be as happy as they could be

C be happier

D earn more money

6. __________ 7. __________ 8. __________ 9. __________ 10. __________

Questions 11—13

Translate the following sentences from the passage into Chinese.

11. I have never known a beautiful woman, for example, who didn't feel her beauty decisively flawed by some (usually) minuscule portion of her physique that she can't bear.

____

____

12. Among those things the world has judged enviable, perhaps only one comes close to garnering near universal agreement: youth.

____

____

13. The cruel deal seems to be this: one is permitted all the physical gifts so long as one doesn't really know how to husband them; and one learns how to husband them only when these gifts have departed.

____

____

Section B

Reading Passage 2

The Most Infamous Komodo Dragon Attacks of the Past 10 Years

Like so many other tourists, for me, a trip to Indonesia was not complete without a detour to see the world's largest lizard in its natural habitat—Komodo National Park. In recent years, visitors have increasingly flooded this corner of Indonesia, drawn in by the thrill of brushing close to something wild and dangerous. Dragons are not to be taken lightly: male lizards can grow up to 10 feet long, weigh 150 pounds and eat up to 80 percent of their own body weight in one sitting. Though attacks are exceptionally rare, they do occasionally occur, mostly when a park guard lets his focus slip for a moment, or a villager has a particularly unlucky day.

Here are some of the most infamous attacks, as described by Mr. Safina, a local guide, and corroborated by media reports:

A Tragic Playdate

In 2007, a dragon killed an 8-year-old boy on Komodo Island, marking the first fatal attack on a human in 33 years, the *Guardian* reported. The attack took place in March's dry season, so rangers speculate that the murderous lizard may have been particularly hungry given that the watering holes—and the prey that gather there—had dried up. The dragon lunged when the boy went behind a bush to use the bathroom, MSNBC writes.

Mr. Safina recalls the boy's friends—who had been playing together in the scrubland near their village—rushing to get help from their parents. According to the *Guardian*, the boy's uncle came running and threw rocks at the lizard until it released his nephew. While the *Guardian* writes that the boy died from massive bleeding from his torso, Mr. Safina recalls the boy being bitten in half.

In light of the tragedy, park wardens launched an island-wide hunt for the man-eating lizard, though whether or not these efforts produced results remains unclear.

Shipwrecked with Dragons

In 2008, a group of scuba divers found themselves swept from waters near their boat by the Flores region's infamously strong current. After spending 10 hours spinning in the tide, around midnight the group washed up on the beach of what seemed like a deserted island, approximately 25 miles from where their ordeal had begun. Their troubles, however, were far from over. They had found their way to Rinca Island, where an estimate 1,300 dragons live.

The attacks began almost immediately, the *Telegraph* reports. A relentless lizard repeatedly came at a Swedish woman, who smacked it with her diving weight belt. It chewed at the lead belt while other divers threw rocks at its head, she said, all the while eyeing her bare feet.

For two days and two nights, the traumatized divers contended with dragons and the tropical heat, surviving off of shellfish they scraped from rocks and ate raw. Finally, an Indonesian rescue crew spotted the diver's orange emergency floats spread out on the rocks. Though in shock, the group rehydrated at the local hospital on Flores Island and celebrated their survival at the town's Paradise Bar.

Dragon Under the Desk

In 2009, Maen, a fellow guide like Mr. Safina, headed to the staff office as he would any other morning. Like all the other buildings on Rinca Island, Maen's unit sat on stilts, and hungry dragons would often gather below to wait for the occasional food scrap. On this morning, however, Maen sensed that he was not alone. Just settling in at his desk, he looked down. At his sandaled feet lay a dragon, peering back up at him.

As it turned out, one of the cleaning crew had left the office door open the night before and the hungry predator had crept in, likely in search of food. Heart pounding, Maen attempted to slowly withdraw his leg from the dragon's vicinity. But he moved too quickly, cueing the motion-sensitive carnivore to lunge. The dragon chomped down on Maen's leg, clenching its jaw shut. Maen kicked at the dragon's neck, then grabbed its jaws with his hands and wrenched its mouth open, slicing open his arm in the process.

Although Maen shouted for help, most of the rangers were in the cafeteria and could not hear his screams. Only one picked up on the noise, and came to investigate.

The dragons—which can smell blood and the scent of death from nearly 6

miles away—followed the crowd. Some rangers fended off the would-be feeding frenzy, while a couple others darted into Maen's office to help their colleague fight free from his attacker. Maneuvering their injured friend through the pack of dragons waiting outside, they managed to carry him to the island's dock, where he was rushed to Flores Island's hospital. The injuries were too much for the small medical center to contend with, however, and Maen wound up being flown to Bali for six hours of emergency treatment and 55 stitches, MSNBC reports. All in all, it took him six months to recover from his brush with the dragon.

Despite the encounter, Maen went back to work, although he only stays indoors now so he does not have to deal directly with the animals.

Horror in Hollywood

Dragon attacks can occur outside of Komodo National Park, too. More than 50 zoos around the world keep the animals as attractions. In 2001, Phil Bronstein, an investigative journalist, suffered an unfortunate encounter with a Komodo dragon at the Los Angeles Zoo. His wife had arranged a private visit to the zoo's dragon pen as a present for her husband, who had always wanted to see a Komodo dragon up close.

Bronstein accepted the invitation and went into the dragon's cage with the zoo keeper. The lizard began licking at Bronstein's white shoes, which the keeper thought must remind the animal of its white rat meals. Following the keeper's advice, Bronstein removed his shoes and socks to avoid tempting the lizard. Then, as he moved into a better position to take a photo with the animal, it lunged.

Bronstein managed to pin the lizard's head down with his other foot, but the animal began jerking back and forth in an attempt to maul and eat its prey. Children gathered around the cage's glass wall, Stone recalled, taking in the spectacle.

Bronstein managed to wrench the dragon's jaw's open and throw it from his foot, then dragged himself out of the cage as the lizard came at him from behind. The top half of Bronstein's foot was gone, and he was covered in scratches from the animal's lunges at his back. Bronstein survived the incident and did not press charges, though the zoo allegedly continued to allow close-up encounters with dangerous animals following the incident.

(Adapted from http://blogs.smithsonianmag.com/science/2013/01/the-most-infamous-komodo-dragon-attacks-of-the-past-10-years/, written by Rachel Nuwer)

Notes

- **Komodo dragon** 科莫多巨蜥，生活在印度尼西亚的科莫多岛、林卡岛、弗洛勒斯岛以及基里·莫堂岛上，是世界上体形最大的蜥蜴，其身长能长到 3 米。这种蜥蜴是食肉类动物，它们通常依靠捕食山羊、鹿和其他哺乳动物为生。科莫多巨蜥的唾液中含有致命的细菌，足以致猎物死亡。
- **Rinca** 也被称为 Rindja，是科莫多岛附近的一个小岛屿，在东努沙登加拉。该岛上有很多科莫多巨蜥。
- **MSNBC** 微软全国广播公司节目，由美国全国广播公司（NBC）和微软公司联合开办，观众既可以在家通过电视机收看有线电视的 MSNBC 节目，也可以通过电脑上网获取在线 MSNBC 的信息。

New Words

infamous ['ɪnfəməs]
adj. having an exceedingly bad reputation 声名狼藉的，无耻的，邪恶的

detour ['di:tʊə]
n. a way of going from one place to another that is longer than the usual way 绕道

ranger ['reɪndʒə]
n. someone whose job is to look after a forest or area of countryside 护林者，别动队员

lunge [lʌndʒ]
vi. to make a sudden strong movement towards someone or something, especially to attack them 突然向前扑

scrubland ['skrʌblənd]
n. an uncultivated region covered with scrub vegetation 灌木丛林地

torso ['tɔ:səʊ]
n. the body excluding the head and neck and limbs 躯干

scuba ['sku:bə]
n. a device that lets divers breathe under water 水肺，便携式水下呼吸器

ordeal [ɔ:'di:əl]
n. a severe or trying experience 折磨，严酷的考验，痛苦的经验

relentless [rɪ'lentlɪs]
adj. not to be placated or appeased or moved by entreaty 无情的，残酷的，不间断的

traumatize ['traʊmətaɪz]
vt. inflict a trauma upon 使受损伤，使受精神创伤

rehydrate [rɪ'haɪˌdreɪt]
vt. to make something less dry, or to provide something with water again 补充水分

stilt [stɪlt]
n. a column of wood or steel or concrete that is driven into the ground to provide support for a structure 支柱，支撑物

scrap [skræp]
n. a small fragment of something broken off from the whole 碎片，残余物

sandal ['sændl]
vt. to wear a shoe consisting of a sole fastened by straps to the foot 穿凉鞋

predator ['predətə]
n. any animal that lives by preying on other animals 捕食者，食肉动物

carnivore ['kɑːnɪvɔː]
n. any animal that feeds on flesh 食肉动物

chomp [tʃɒmp]
vi. chew noisily 咯咯地咬牙

frenzy ['frenzɪ]
n. state of violent mental agitation 狂暴，狂怒

dart [dɑːt]
vi. to move suddenly and quickly in a particular direction 猛冲，快速移动

maneuver [mə'nʊvə]
vi. to move or turn skillfully or to move or turn something skillfully, especially something large and heavy 调遣，用计谋移动

jerk [dʒɜːk]
vt. to pull, or move with a sudden movement 猛拉

maul [mɔːl]
vt. to injure badly by beating 殴打，粗暴对待

allegedly [ə'ledʒɪdlɪ]
adv. used when reporting something that people say is true, although it has not been proved 据称，据说

Phrases and Expressions

fend off 避开，挡开

Exercises

Questions 14—23

*Complete the table below. Choose **NO MORE THAN TWO WORDS** from the passage for each answer.*

The Attacks of Komodo Dragon

Time	Victims	Reason of being attacked	Results
In 2007	An 8-year-old boy	It was so dry that the dragons might be very 14__________ because the watering holes had dried up	The boy died from 15__________.
In 2008	A group of 16__________	The powerful waves 17__________ the divers who finally reached a 18__________.	The group 19__________ at the local hospital and 20__________ their survival.
In 2009	Maen	The office door was 21__________ so the dragon had 22__________.	Maen had spent 23__________ recovering before he went back to work.

Questions 24—28

Do the following statements agree with the information given in the passage? In brackets 24–28, write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

24. (　　) The natural residence of the biggest lizard lies in Indonesia.

25. (　　) A series of dragons' attacks tremendously damage Indonesian tourism.

26. (　　) A group of scuba divers suffered attacks after they smack a lizard with a diving weight belt.

27. (　　) Bronstein was bitten probably because his white shoes looked like the dragon's prey.

28. (　　) Los Angeles Zoo forbade visitors to get in a close touch with the dragon after the horrible event.

Questions 29—30

Translate the following sentences from the passage into Chinese.

29. Though attacks are exceptionally rare, they do occasionally occur, mostly when a park guard lets his focus slip for a moment, or a villager has a particularly unlucky day.

30. Bronstein managed to pin the lizard's head down with his other foot, but the animal began jerking back and forth in an attempt to maul and eat its prey. Children gathered around the cage's glass wall, Stone recalled, taking in the spectacle.

Reading Passage 3

How Free Will Collides with Unconscious Impulses

Free won't volition as self-control exerts veto power over impulses.

At a restaurant recently I faced many temptations: a heavy stout beer, a buttery escargot appetizer, a marbled steak, cheesecake. The neural networks in my brain that have evolved to produce the emotion of hunger for sweet and fatty foods, which in our ancestral environment were both rare and sustaining, were firing away to get me to make those selections. In competition were signals from other neural networks that have evolved to make me care about my future health, in particular how I view my body image for status among males and appeal to females and how sluggish I feel after a rich meal and the amount of exercise I will need to counter it. In the end, I ordered a light beer, salmon and a salad with vinaigrette dressing and split a mildly rich chocolate cake with my companion.

Was I free to make these choices? According to neuroscientist Sam Harris in his luminous new book *Free Will* (Free Press, 2012), I was not. "Free will is an illusion," Harris writes. "Our wills are simply not of our own making." Every step in the causal chain above is fully determined by forces and conditions not of my choosing, from my evolved taste preferences to my learned social status concerns—causal pathways laid down by my ancestors and parents, culture and society, peer groups and friends, mentors and teachers, and historical

contingencies going all the way back to my birth and before.

Neuroscience supports this belief. The late physiologist Benjamin Libet noted in EEG readings of subjects engaged in a task requiring them to press a button when they felt like it that half a second before the decision was consciously made the brain's motor cortex lit up. Research has extended the time between subcortical brain activation and conscious awareness to a full seven to 10 seconds. A new study found activity in a tiny clump of 256 neurons that enabled scientists to predict with 80 percent accuracy which choice a subject would make before the person himself knew. Very likely, just before I became consciously aware of my menu selections, part of my brain had already made those choices. "Thoughts and intentions emerge from background causes of which we are unaware and over which we exert no conscious control," Harris concludes. "We do not have the freedom we think we have."

True enough. But if we define free will as *the power to do otherwise*, the choice to veto one impulse over another is *free won't*. Free won't is veto power over innumerable neural impulses tempting us to act in one way, such that our decision to act in another way is a real choice. I could have had the steak—and I have—but by engaging in certain self-control techniques that remind me of other competing impulses, I vetoed one set of selections for another.

Support for this hypothesis may be found in a 2007 study in the *Journal of Neuroscience* by neuroscientists Marcel Brass and Patrick Haggard, who employed a task similar to that used by Libet but in which subjects could veto their initial decision to press a button at the last moment. The scientists discovered a specific brain area called the left dorsal frontomedian cortex that becomes activated during such intentional inhibitions of an action: "Our results suggest that the human brain network for intentional action includes a control structure for self-initiated inhibition or withholding of intended actions." That's free won't.

In addition, a system has "degrees of freedom," or a range of options that may result from its complexity and the number of intervening variables. Ants have a few degrees, rats more, chimps many more still, humans the most. Some people—psychopaths, the brain-damaged, the severely depressed or the chemically addicted—have fewer degrees than others, and the law adjusts for their lowered capacity for legal and moral accountability.

These vetoing neural impulses within a complex system with many degrees of freedom are part of the deterministic universe. Thinking of volition as a

component of the causal net let us restore personal responsibility to its rightful place in a civil society.

(Adapted from http://www.scientificamerican.com/article/how-free-will-collides-with-unconscious-impulses/, written by Michael Shermer)

Notes

- **neuroscience** 神经系统科学，传统意义上，神经系统科学一直被认为是生物学的分支，但现在更多被认为是交叉学科，涉及化学、计算机科学、工程学、语言学、数学、医学，以及哲学、物理学、心理学等。
- ***Journal of Neuroscience***《神经系统科学杂志》

New Words

volition [və'lɪʃən]
n. the power to choose or decide something without being forced to do it 意志，意愿，决定，选择

veto ['viːtəʊ]
vt. to officially refuse to allow something to happen, especially something that other people or organizations have agreed 否决，不同意，不批准，禁止

stout [staut]
adj. strong and thick 烈性的

buttery ['bʌtərɪ]
adj. resembling or containing or spread with butter 像黄油样的

escargot [e'skɑːgəʊ]
n. edible terrestrial snail usually served in the shell with a sauce of melted butter and garlic 食用蜗牛

marbled ['mɑːbld]
adj. patterned with veins or streaks or color resembling marble 大理石般的，有大理石纹彩的

sluggish ['slʌgɪʃ]
adj. moving or thinking slowly 行动迟缓的，反应慢的，无精打采的

salmon ['sæmən]
n. any of various large food and game fishes of northern waters, usually migrate from salt to fresh water to spawn 鲑鱼，大马哈鱼，鲑鱼肉

vinaigrette [ˌvɪnɪ'gret]
n. oil and vinegar with mustard and garlic 色拉调味汁（用油、醋和各种香草等混合而成）

neuroscientist ['njʊərəʊsaɪəntɪst]
n. specializes in the study of the brain 神经科学家

luminous ['luːmɪnəs]
adj. softly bright or radiant 发光的，明亮的，清楚的

contingency [kən'tɪndʒənsɪ]
n. an event or situation that might happen in the future, especially one that might cause problems 意外事故，偶发事件，可能性，偶然性

physiologist [ˌfɪzɪ'ɒlədʒɪst]
n. a biologist specializing in physiology 生理学者

subcortical ['sʌb'kɔːtɪkəl]
adj. of or relating to or being or involving nerve centers below the cerebral cortex 皮层下的

clump [klʌmp]
n. a compact mass 丛，土块

neuron ['njʊərɒn]
n. a cell that is specialized to conduct nerve impulses 神经元，神经细胞

innumerable [ɪ'njuːmərəbəl]
adj. many, or too many to be counted 无数的，数不清的

hypothesis [haɪ'pɒθɪsɪs]
n. an idea that is suggested as a possible way of explaining a situation, proving an idea etc., which has not yet shown to be true 假设，假说，前提

dorsal ['dɔːsəl]
adj. belonging to or on or near the back or upper surface of an animal or organ or part 背的，脊的，背部的

inhibition [ɪnhɪ'bɪʃən]
n. the conscious exclusion of unacceptable thoughts or desires 抑制，压抑，禁止

intervening [ˌɪntə'viːnɪŋ]
adj. the amount of time between two events 发生于其间的，介于中间的

psychopath ['saɪkəpæθ]
n. someone with an antisocial personality disorder 精神变态者，精神病患者

deterministic [dɪˌtɜːmɪ'nɪstɪk]
adj. an inevitable consequence of antecedent sufficient causes 确定性的，（观点、解释等）（基于）决定论的

Exercises

Questions 31—34

*Do the following statements agree with the information given in the passage? In brackets **31—34**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

31. (   ) In ancient times, sweet and fatty foods were few.

32. (   ) According to research, the time between subcortical brain activation and conscious awareness ranges from seven to ten seconds.

33. (   ) Free won't is the power to exert veto over countless neural impulse luring us to act in one way.

34. (   ) The right dorsal frontomedian cortex becomes activated when one restrains himself from implementing an action on purpose.

Questions 35—39

*Choose the correct letter, **A**, **B**, **C**, or **D**. Write the correct letter in blanks **35—38**.*

35. The following items are of great temptation to the author EXCEPT ____________.

A a fried chicken
B cheesecake
C a marbled steak
D a heavy stout beer

36. After struggling in mind, the author finally decided to order ____________.

A a beer which is not strong
B salmon and a salad
C moderately rich chocolate cake
D all of the above

37. It is written in the book *Free Will* that ____________.

A free will is a delusion
B our wills are of our own making
C we are free to make choices
D free will is a reality

38. Harris's conclusion is that ___________.
   A we can exert conscious control over our choice
   B we are aware of the background causes
   C thoughts and intentions emerge from our brain
   D we do not enjoy the freedom we imagine

39. According to "degree of freedom", the one with most degrees is ___________.
   A humans
   B ants
   C rats
   D chimps

35. __________ 36. __________ 37. __________ 38. __________ 39. __________

Questions 40—42

Translate the following sentences from the passage into Chinese.

40. The neural networks in my brain that have evolved to produce the emotion of hunger for sweet and fatty foods, which in our ancestral environment were both rare and sustaining, were firing away to get me to make those selections.

____

____

41. Very likely, just before I became consciously aware of my menu selections, part of my brain had already made those choices.

____

____

42. I could have had the steak—and I have—but by engaging in certain self-control techniques that remind me of other competing impulses, I vetoed one set of selections for another.

____

____

Unit 9

Section A

Reading Passage 1

Health Care

A new prescription for the poor America is developing a two-tier health system, one for those with private insurance, the other for the less well-off.

A "It's time for Dancing with the Stars!" a woman announces enthusiastically. At this New York health centre, wedged between housing projects to the east and Chinatown to the west, "dancing with the stars" means dancing with a physical therapist. An old man stands up with a nurse and begins a determined samba.

B Comprehensive Care Management (CCM), which runs this centre, tries to keep old people active. To do so, explains Joseph Healy, the chief operating officer, is in the company's best interest. The government pays CCM a capped rate for the care of its members. If someone gets sick, his health costs rise and the company's margin shrinks. Mr. Healy argues that the system is the best way to provide good care at a low cost. Increasingly others seem to agree.

C Medicaid, America's health programme for the poor, is in the process of being transformed. Over the next three years, New York will move its entire Medicaid population into "managed care", paying companies a set rate to tend to the poor, rather than paying a fee for each service. New York is not alone. States from California to Mississippi are expanding managed care. It is the culmination of a steady shift in the way most poor Americans receive their health-care treatment.

D Medicaid is America's single biggest health programme. This year roughly one in five Americans will be covered by Medicaid for a month or more. It gobbles more federal and local money than any state programme, other than education. Costs will rise even more when Barack Obama's health-care reform expands the programme by easing eligibility rules in 2014. Congress's "supercommittee" is already considering cuts. However, there are more

immediate pressures behind the present drive for change.

E Enrollment in Medicaid jumped during the downturn, from 42.7m in December 2007 to 50.3m in June 2010. Mr. Obama's stimulus bill helped to pay for some of this, but that money has dried up. Faced with gaping deficits, some desperate governors slashed payments to hospitals and doctors, or refused to pay for trips to the dentist or oculist. But much the most important result has been structural: the expansion of managed care.

F States have dabbled in managed care for decades. The trend accelerated in the 1990s, with the share of Medicaid patients under this form of care reaching 72% by 2009. Now, however, there is a strong push for the remainder. States that did not have managed care, such as Louisiana, are introducing it. Other states are extending it to people previously deemed off limits: California and New York, for example, are moving the elderly and disabled into that system of care. Texas is targeting more than 400,000 Medicaid beneficiaries in the Rio Grande Valley. Local politicians had resisted the move, nervous that care might deteriorate. But the yawning deficit meant that they were overruled.

G The result is a country with two distinct tiers of health care. Most Americans with private insurance are still horrified by thoughts of health-management organisations and prefer to pay fees for each medical service. For the poor, managed care is becoming the norm.

H Advocates of managed care have high expectations. First, they hope that it will make costs more predictable. Second, they believe that the change will improve patients' health. In managed care, a patient has a network of doctors and specialists. If the programme works properly, doctors can monitor all aspects of care, in contrast to the fragmented fee-for-service system. The contracts that states have with firms can set standards for quality. Texas, for instance, will cut 5% from a company's payment if it does not meet what is required.

I The next step is to integrate care for those eligible for both Medicaid and Medicare, the federal programme for the old. These "duals" account for almost 40% of Medicaid's costs and just 15% of its population. "If managed care can really deliver better care than fee-for-service," says Diane Rowland, chair of the commission that advises Congress on Medicaid, "this is the population that could prove it."

J But some, such as Norma Vescovo, are sceptical. As the head of the non-profit

Independent Living Centre of Southern California (ILCSC), Ms. Vescovo serves Medicaid patients with severe health problems. Over the years she has often sued California on policies that she thinks will hurt her vulnerable clients. On October 3rd her case moved to the Supreme Court.

K The outcome of Douglas v Independent Living Centre will have profound implications for the future of Medicaid. Ms. Vescovo's suit concerns cuts to hospitals and doctors. But the case will also guide the course of managed care. If ILCSC and its co-plaintiffs win, private groups will continue to be able to challenge states on policies they think violate federal Medicaid law. Ms. Vescovo, who argues that California's payment cuts would eviscerate her clients' access to services, worries that under managed care the disabled might not be able to see the specialists they need.

L The question is how to supervise the experiments with managed care that are being carried out in various states. To date, Medicaid beneficiaries have been able to challenge the states in court. However, if the Supreme Court rules against ILCSC, that avenue will be closed. The Centres for Medicare and Medicaid Services (CMS) technically can intervene if states do not provide proper access to care. In reality, CMS has few tools to do so.

M "I'm a big fan of managed care," says Sara Rosenbaum, a professor at George Washington University, "but this transformation may happen with almost no federal oversight." Medicaid beneficiaries are vulnerable, in worse health than Americans as a whole. Companies may struggle to cut costs and provide good care as well. If states do not draft their contracts properly, or fail to be vigilant in monitoring patients' health, their experiment in managed care could be a disaster. On the other hand, if states are careful they could provide an answer to the question that has vexed America for years: how to provide good, cheap health care.

(Adapted from *The Economist*, October 8, 2011, anonymous)

Notes

- **health care in the United States** 美国医疗卫生服务由多家机构共同承担。医疗卫生设施大部分由私营企业掌管和经营，60%~65% 的卫生保健设施和经费来自于老年保健医疗制、医疗补助计划、儿童健康保险项目等。

- **Medicaid** 医疗补助计划，是资助低收入家庭的美国医疗保健项目。该项目根据收入调查而确定由联邦政府和州政府联合出资但由州政府管理。服务对象为美国公民或合法永久居民，包括低收入成年人，他们的孩子，以及有某种残疾的人群。

- **Medicare** 老年保健医疗制，于 1965 年由美国联邦政府建立并管理的一家国家社会保险项目，保证为 65 岁及以上的老年人、残疾年轻人，以及患有终末期肾病和肌肉萎缩症的人群提供医疗救助。

New Words

prescription [prɪ'skrɪpʃən]
n. a plan that will help to you achieve something, or that will have a particular result 规划

two-tier ['tuː'tɪə]
adj. having two levels, especially two levels of administration or two standards of treatment or privilege 双重的，二层的

wedge [wedʒ]
vt. to fix something tightly or in a small space 塞，挤

therapist ['θerəpɪst]
n. someone whose job is to help people with physical, mental, or emotional problems, using a particular type of therapy 治疗师

culmination [kʌlmɪ'neɪʃən]
n. the final result of a process or situation 结束

gobble ['gɒbl]
vt. to eat something quickly and often noisily 狼吞虎咽

eligibility [ˌelɪdʒə'bɪlətɪ]
n. the quality or state of being eligible 合格，有资格

slash [slæʃ]
vt. to reduce something by a large amount 削减，减少

oculist ['ɒkjʊlɪst]
n. an optometrist or ophthalmologist 眼科医生

dabble ['dæbl]
vt. to be involved in an activity for a short time in a way that is not very serious 插手，涉猎，涉足

remainder [rɪ'meɪndə]
n. the part of something that is left after the rest has gone or been finished 其余的，余下的，其他部分的

deem [diːm]
vt. to judge or consider something in a particular light 认为，视为

beneficiary [benɪ'fɪʃərɪ]
n. someone who gets an advantage from a situation 受益者，受惠者

deteriorate [dɪ'tɪərɪəreɪt]
vi. to become or make something worse in quality, value, or strength 变质，恶化

overrule [əʊvə'ruːl]
vt. to officially change a decision that someone else has made 驳回，否决

dual ['djuːəl]
adj. used about things that have two similar aspects, parts, or functions 双重的

sceptical ['skeptɪkəl]
adj. having doubts about something that other people think is true or right 怀疑

sue [sjuː]
v. to make a legal claim against someone, usually to get money from them because they have done something bad to you 控告，打官司

vulnerable ['vʌlnərəbəl]
adj. someone who is vulnerable is weak or easy to hurt physically or mentally 脆弱的，易受伤害的

plaintiff ['pleɪntɪf]
n. someone who brings a legal case against someone else in a court of law 原告

eviscerate [ɪ'vɪsəreɪt]
vt. to make something such as an organization or system much less effective or powerful 抽去精华，挫伤元气

intervene [ɪntə'viːn]
vt. to become involved in a situation in order to try to stop or change it 干预，干涉

oversight ['əʊvəsaɪt]
n. the job of checking that a process or system is working well 监督，看管

vigilant ['vɪdʒɪlənt]
adj. watching a person or situation very carefully so that you will notice any problems or signs of danger immediately 警戒着的，极留神的，警醒的

vex [veks]
vt. to make someone annoyed, confused, or worried 使烦恼，使焦急，使悲伤

Phrases and Expressions

well-off	顺利的，幸运的，富有的
dry up	干枯，枯竭，停滞
all aspects of	各个方面
account for	证明，说明，占（比例）

Supreme Court 最高法院

a big fan of 赞同，喜欢

Text Analysis

The essay is an exposition, focusing on the theme—American health care system. It can be roughly divided into four parts.

Part one consists of two paragraphs, Paragraphs 1 & 2, informing readers of American health care system with support from the public. A woman expresses her satisfaction with the reform in Paragraph 1; Joseph Healy remarks "the best way to provide good care at a low cost" in Paragraph 2.

Part two is made up of five paragraphs from Paragraph 3 to Paragraph 7, where the writer presents a dilemma of Medicaid. It is American single biggest health problem with large population enrolled and much financial support from both Obama's and states' governments. On the other hand, it is suffering because of its expansion of managed care, varying from financial pressure to most people's worry—care might become worse in quality and condition.

Part three covers three paragraphs from Paragraph 8 to Paragraph 10. Despite high expectations, some people are still full of doubts on Medicaid. Paragraphs 8 & 9 address the expectations while Paragraph 10 states a fact that Head of ILCSC has accused Californian policies on Medicaid patients, claiming that her vulnerable client will hurt.

Part four consists of two paragraphs, from Paragraphs 11 & 12, informing readers the implications of ILCSC case. Paragraphs 11 & 12 respectively state the different implications in terms of the different results. Private groups would continue to challenge states on policies if ILCSC won in Paragraph 11, or, CMS would technically intervene though there are no tools to do so.

Part five, the very last Paragraph, ends the essay with a quotation from a professor at George Washington University, further stating the importance of government' supervision. To put it simply, a failure in supervision could result in a disaster in the process of Medicaid.

Word Roots

scribe，script 词根源于拉丁文 scribere（= write 写），过去分词为 scriptus

同根词：

prescription *n.* 药方，处方，处方药

describe	*v.*	描写，形容
indescribable	*adj.*	不能言传的，难以形容的
ascribe	*v.*	归因于
manuscript	*n.*	原稿，抄本
postscript	*n.*	（书信中）附笔，再起

根据词根词缀猜下列词的词义：

1. scribe	*n.*	________
2. scripture	*n.*	________
3. conscribe	*v.*	________
4. inscribe	*v.*	________
5. proscribe	*v.*	________
6. transcribe	*v.*	________

gress，grade 词根源于拉丁文 gradi（= walk 行走），gradus（= step 迈步）

同根词：

congress	*n.*	国会
progress	*n.*	进步
transgress	*v.*	逾越，违反
degrade	*v.*	降低，降职
retrograde	*v.*	倒退，退后，退步
upgrade	*v.*	改良，提高

根据词根词缀猜下列词的词义：

7. aggress	*v.*	________
8. digress	*v.*	________
9. egress	*v.* & *n.*	________
10. ingress	*n.*	________
11. regression	*n.*	________
12. retrogress	*v.*	________

ven，vent 词根源于拉丁文 venire（= to come 来到）

同根词：

intervene	*v.*	介入，干涉，调停
avenue	*n.*	林荫路，道路，通路
revenue	*n.*	收入

souvenir	*n.*	纪念品，纪念物
advent	*n.*	到来
adventitious	*adj.*	偶然的，外来的，偶发的
misadventure	*n.*	不幸，灾难

根据词根词缀猜下列词的词义：

13. circumvent	*v.*	________________
14. contravention	*n.*	________________
15. convene	*v.*	________________
16. conventional	*adj.*	________________
17. eventuate	*n.*	________________
18. supervene	*v.*	________________

Synonyms

queer, odd, funny, curious, peculiar, strange, eccentric, quaint, singular
这些形容词均有“奇怪的，奇异的，新奇的”之意。

queer：指一种令人愉快的怪诞，强调事物的古怪和不可思议。

odd：通常指不寻常、没有预料地出现的人或事物，往往引起他人的注意或奇怪。

funny：较通俗用词，指奇怪得滑稽可笑或反常。

curious：通常指非常特别或能引起注意、研究或探索的奇特事物或现象。可用于贬义，指爱管闲事的。

peculiar：侧重罕见的或独一无二的特性，也指性格特征方面显著的与众不同之处。

strange：普通用词，含义广泛，指陌生、新奇、奇怪或不自然的人或物。

eccentric：指偏离常规的怪异或怪癖。

quaint：指古色古香，让人感到既奇怪又有趣。

singular：通常指异常或奇特，暗含不同于一般。

Complete the following sentences with the proper form of the words listed above.

19. Visitors can have a great view on those ____________ little cottages in villages.

20. I don’t think that’s at all ____________.

21. He had a ____________ feeling that it seemed that he had been here before.

22. Hide it where ___________ eyes won't see it.

23. It seems that she's gone a bit ___________ in the head, i.e. slightly crazy.

24. In ancient times, some natural disasters, like lightning, were considered to be ___________ occurrences.

25. The referee finally made a rather ___________ decision.

26. His paintings are a rather ___________ mixture of German and British influences.

27. I felt ___________ to be visiting the place again after all these years.

significant, important, momentous

这些形容词均有“重要的，重大的”之意。

significant：指某事物由于特别优秀或特别有意义而显得重要与突出。

important：普通用词，指有权威、有影响的人或值得注意的、有价值的事物。

momentous：指极其重要的事件。

Complete the following sentences with the proper form of the words listed above.

28. The past three years have been among the most ___________ in world history.

29. It is the first drug that seems to have a very ___________ effect on this disease.

30. It is ___________ to keep calm in an emergency.

31. The ___________ news was that war had begun.

Exercises

Questions 1—4

Answer the questions below. Choose ***NO MORE THAN FOUR WORDS*** *from the passage for each answer.*

1. What center does Comprehensive Care Management (CCM) operate?

____

2. What programme uses federal and local money most?

____

3. How many population has soared in Medicaid from the end of 2007 to June 2010?

____

4. What ideas threaten the well-off in America?

____

Question 5—7

*Choose the correct letter **A**, **B**, **C** or **D**. Write the correct letter in blanks **5—7**.*

5. Which one is NOT the reason for supporting the Medicaid?
   A The charges are supposed to be predictable.
   B The poor can enjoy good care to a large extent.
   C The government can cut down expense.
   D Patients' health can be improved.

6. Which state is planning to set up managed care?
   A California.
   B Louisiana.
   C New York.
   D Texas.

7. What results in financial shortage of Medicaid?
   A Expand enrollment.
   B Huge management institution.
   C Short of state money.
   D Doctor's high payment.

5. ____________ 6. ____________ 7. ____________

Question 8—11

*Complete the summary below. Choose **ONE WORD ONLY** from the passage for each answer.*

Though serving Medicaid patients, Ms. Vescovo is still 8____________. She is worried that payments-cut in hospital and doctors would remove patients' 9____________ to services. Worse still, The CMS has no 10____________ tools to supervise experiments with managed care Professor Sara says these experiments would be a disaster for lacking of government 11____________.

Question 12—14

Translate the sentences from the passage into Chinese.

12. Over the next three years, New York will move its entire Medicaid population into "managed care", paying companies a set rate to tend to the poor, rather than paying a fee for each service.

____

____

13. "If managed care can really deliver better care than fee-for-service," says Diane Rowland, chair of the commission that advises Congress on Medicaid, "this is the population that could prove it."

____

____

14. Ms. Vescovo, who argues that California's payment cuts would eviscerate her clients' access to services, worries that under managed care the disabled might not be able to see the specialists they need.

____

____

Section B

Reading Passage 2

Protect Women's Health

Political attacks on Planned Parenthood pose a threat to the well-being of millions of women in the U.S.

A Almost 100 years ago Margaret Sanger opened a tiny birth-control clinic in the Brownsville section of Brooklyn, N.Y. Poor Yiddish- and Italian-speaking women, overwhelmed by large families that they could not support, would come for advice about how to avoid pregnancy and the dangers of horrific, sometimes life-threatening, self-administered abortions. The clinic taught women to use the diaphragm. Nine days after it opened, Sanger and two other women who ran the center were jailed for violating a New York State law that prohibited contraception.

B This clinic eventually grew into Planned Parenthood, the nation's largest nonprofit supplier of reproductive health services to women and men. A century after its founding, the organization is again at the heart of one of the most divisive issues in American political life. It has come under attack by Republican presidential candidates seeking to revoke the group's federal funding—almost half of its one-billion-dollar budget comes from federal and state sources. Last year the House of Representatives voted to withdraw

some of its support, although the measure was not sustained in the Senate. (Backing for the group, initiated under the Nixon administration, has not always been a partisan issue.) In March, Mitt Romney, the GOP's presumptive presidential candidate, vowed to end federal funding if elected. This is a worrying prospect for both women and public health.

C For some people, Planned Parenthood has come to symbolize abortion, which it has provided since 1970. But in all the rhetoric, facts have sometimes gone missing. For instance, Senator Jon Kyl of Arizona declared last year on the floor of the Senate that abortion accounts for "well over 90 percent" of what Planned Parenthood does. The actual figure is 3 percent. (Planned Parenthood clinics perform one in four abortions in the U.S. but use no federal funds for this practice.) To some abortion opponents, that 3 percent is reason enough to gut the organization. If a future Congress and White House were to do so, however, it would drive women once again into the back alleys, without necessarily decreasing the number of abortions.

D Stripping Planned Parenthood of federal funding would also sacrifice the 97 percent of its public health work that has nothing to do with abortion, from which many people benefit directly. One in five American women have used the group's services, and three out of four of its patients are considered to have low incomes. In 2011 it carried out tests and treatment for more than four million individuals with sexually transmitted diseases. It supplied 750,000 exams to prevent breast cancer, the most common cancer among U.S. women. And it performed 770,000 Pap tests to prevent cervical cancer, which was a leading cause of death among women before this screen became widely available. Planned Parenthood is one of the most important public health care institutions in the country, even aside from its work in rational family planning.

E Family planning has benefited society in numerous ways. It has saved lives, opened new horizons for women and kept populations from soaring. Since 1965, the year the Supreme Court struck down a Connecticut law that made access to contraception illegal, women's ability to plan and space out pregnancies has contributed to a 60 percent decline in maternal deaths. By 2002, moreover, only 9 percent of births were unwanted, compared with 20 percent in the early 1960s. As a major provider of contraceptives—it furnished birth control to two million Americans last year—Planned Parenthood serves as "America's largest abortion preventer," as one *Chicago Tribune* writer pointed out.

F Access to birth control in the U.S. has helped narrow the income inequality gap between men and women by as much as 30 percent during the 1990s alone. The pill has given women greater choice about when to have children,

freeing them up to acquire career skills. By 2009 women procured more than half of all U.S. doctoral degrees, compared with 10 percent in 1960. The health and well-being of a society correlates highly with the status of its women. In many parts of the Middle East, Asia and Africa, women are now making gains, to the betterment of all, in access to education and jobs—both contingent on family planning. Now is a particularly bad time for Americans, as citizens of the world, to forget what we have accomplished at home.

(Adapted from *Scientific American*, June 2012, written by the Editors)

Notes

- **Planned Parenthood** 计划生育
- **Brooklyn** 布鲁克林，美国纽约市西南部的一个区。
- **GOP** 大老党，美国共和党的别称。
- **Pap test** 早期子宫颈癌涂片检验（Papanicolaou test）
- ***Chicago Tribune***《芝加哥论坛报》，日报，为美国报刊发行量第八大报刊。

New Words

diaphragm ['daɪəˌfræm]
n. a round rubber object that some women wear inside their vagina so that they can have sex without having children（避孕用的）子宫帽

contracept ['kɒntrəsept]
vt. to control birth by the use of devices（使）避孕

reproductive [ˌri:prə'dʌktɪv]
adj. producing new life or offspring 生殖的，复制的

divisive [dɪ'vaɪsɪv]
adj. having the effect of dividing people into groups with opposing opinions 离间的，引起分歧的

revoke [rɪ'vəʊk]
vt. to cancel officially 撤销，取消，废除

partisan ['pɑ:tɪzæn]
adj. devoted to a cause or party 党派性的，偏袒的

presumptive [prɪ'zʌmptɪv]
adj. based on a reasonable belief about what is likely to be true 假定的

vow [vaʊ]
vi. & *vt.* to make a solemn pledge; promise 起誓，发誓

rhetoric ['retərɪk]
n. using language effectively to please or persuade; excessive use of verbal ornamentation 修辞学，雄辩术，华丽的文辞

gut [gʌt]
vt. to destroy the inside or contents of (a building, room etc.) 毁坏（建筑物等）的内部

alley ['ælɪ]
n. a narrow street between or behind buildings 胡同，小巷，小径

cervical ['sɜːvɪkəl]
adj. relating to or associated with the neck; of or relating to the cervix of the uterus 颈的，子宫颈的

maternal [mə'təːnl]
adj. relating to or derived from one's mother 母亲的，母亲般的，母系的

procure [prəʊ'kjʊə]
vi. & *vt.* to obtain something, especially something that is difficult to get 取得，获得，实现

correlate ['kɒrəleɪt]
vi. & *vt.* to place or be placed in a mutual, complementary, or reciprocal relationship 使互相关联，联系

betterment ['betəmənt]
n. change for the better; progress in development 改良，改进

Phrases and Expressions

account for （在数量、比例上）占，对……负责
space out 留间隔，拉开距离
contingent on 视……而定

Exercises

Questions 15—20

*The passage has six paragraphs, **A—F**. Which paragraph contains the following information?*

*Write the correct letter, **A—F**, in blanks **15—20**.*

NB: You may use any letter more than once.

15. Planned Parenthood has contributed a lot in preventing abortion.

16. Women in poor families had to deal with abortion themselves.

17. Republican presidential candidates wanted to strip Planned Parenthood of federal funding.

18. Family planning contributes to the betterment of women and the whole American society.

19. Planned Parenthood has benefited millions of American women in reproductive health care.

20. Planned Parenthood arose heated disputes in American political life.

15. ________ 16. ________ 17. ________ 18. ________ 19. ________ 20. ________

Questions 21—25

*Answer the questions below. Choose **NO MORE THAN FOUR WORDS** from the passage for each answer.*

21. What was forbidden by New York State legislation a century ago?

____

22. What did one presidential candidate swear to do if he won the election?

____

23. How many abortions Planned Parenthood actually does in the U.S.?

____

24. What disease was the leading killer of women before screen is widely used?

____

25. Since 1965, what were women legally allowed to do?

____

Questions 26—28

Translate the sentences from the passage into Chinese.

26. If a future Congress and White House were to do so, however, it would drive women once again into the back alleys, without necessarily decreasing the number of abortions.

____

____

27. Stripping Planned Parenthood of federal funding would also sacrifice the 97 percent of its public health work that has nothing to do with abortion, from which many people benefit directly.

____

____

28. Now is a particularly bad time for Americans, as citizens of the world, to forget what we have accomplished at home.

____

____

Reading Passage 3

Ride to Work on a Roller Coaster

A Japanese train based on a theme park ride could make travel quieter, cleane—a lot more fun.

The green-and-white door slides shut and a man in a blue cap and beige overalls mutters into his walkie-talkie. He raises a blue-gloved hand to signal departure and we're off. The train's two carriages stutter into motion, trundling along the elevated rails before speeding up as they roll down the gently undulating track. The journey is short, smooth and almost silent—it's a mere 100 metres between "stations".

The Eco-Ride train feels like a ride on a roller coaster—and that's pretty much what it is. In a few year's time, this cheap and energy-efficient train could be ferrying passengers around areas of Japan devastated by last year's tsunami.

Developed at Tokyo University's Institute of Industrial Science (IIS), with the help of amusement ride firm Senyo Kogyo, Eco-Ride works in the exactly the same way as a theme park roller coaster. By turning potential energy into kinetic energy, it coasts along its tubular tracks without an engine. The train's speed is controlled by aerodynamics and by "vertical curves", sections of track that form the transition between two sloping segments. The Eco-Ride is set in motion and slowed at stations via rotating wheels between the rails that catch a fin underneath the train.

When fully installed, Eco-Ride would ply a route, ideally circular, at speeds of up to 60 kilometres per hour. The idea is that Eco-Ride will use its own inertia to get up most slopes but may on occasion need to be winched up steeper inclines. If it was first lifted to a height of 10 metres, the train could comfortably cover a distance of 400 metres, says its developer, Yoshihiro Suda, director of the IIS Advanced Mobility Research Center.

The lack of any engine makes carriages extremely light, so the energy required

to propel them is small and the emissions low. Plus there is no need for the expensive, bulky infrastructure that usually accompanies the building of new train tracks.

"This is probably the ultimate energy-saving transportation system," says Suda. A number of municipalities in Japan have shown an interest in the system including communities hit by last year's devastating earthquake and tsunami in the Tohoku region in the north-east, he says. Other uses could be feeder routes between other transportation networks, or communities and college campuses located beyond what might be considered a reasonable walking distance, he added. Suda expects the first Eco-Ride to be in operation sometime in 2014.

The prototypes that scuttle down the track at the leafy suburban test facility in Chiba already look good to go, and efforts have been made to create a genuine travel experience. Having climbed up the steps to the makeshift platform I hand in my Eco-Ride ticket—on it are printed the date and time of departure and a request to be ready to board 5 minutes prior to departure. A poster at the station explains various technical aspects of the system and includes a computer-generated image of an Eco-Ride winding its way among city skyscrapers and above the cars and pedestrians below.

That might seem a bit far off but Eco-Ride would be perfect for the area around Tohoku, hit hard by last's year tsunami, says Masao Kuwahara at the university there. "Tohoku is a largely undulating region and with many residential areas being relocated to higher ground while workplaces are near the sea, a transport system that relies on gravity is perfectly suited to the topographical conditions," he says.

Yet, there are those who believe there is still some way to go before the system will be trundled out for real. "In terms of its simplicity and eco-friendliness, I think the idea of using a roller-coaster-like vehicle to transport people is remarkable," says Takayuki Morikawa at Nagoya University. "However, recently there are trains that are able to regenerate energy when braking or travelling along downhill gradients, so I think it is necessary to scrutinise which of the two is more efficient."

But for others, the simple fact that they are riding a roller coaster—albeit a slower one—gives Eco-Ride instant glamour.

"Imagine having a roller coaster ride as part of your commute to work," says

sales account manager Yumi Ito, who tried Eco-Ride at a recent open day. "Now that would brighten up your day."

(Adapted from *New Scientist*, December 2012, written by Rob Gilhooly)

Notes

- **Tokyo University's Institute of Industrial Science** (IIS) 东京大学的工业科学研究所
- **Senyo Kogyo** 日本泉阳兴业株式会社
- **Tohoku region** （日本）东北地区
- **Chiba** 千叶，日本本州岛东南部城市。
- **Nagoya University** 名古屋大学，主校区位于日本爱知县名古屋市。

New Words

roller coaster ['rəʊlə 'kəʊstə]
n. elevated railway in an amusement park 过山车

slide [slaɪd]
vi.&*vt.* to move slowly over a surface while continuing to touch it, or to make something move in this way 滑落，下跌，逐渐降低

beige [beɪʒ]
n. a pale dull yellowish brown color 米黄色，淡棕色

mutter ['mʌtə]
vi.&*vt.* say something in a low voice not meant to be heard; grumble in an indistinct voice 轻声低语，咕哝地抱怨

walkie-talkie ['wɔːkiː'tɔːkiː]
n. small portable radio link (receiver and transmitter) 手提无线电话机

stutter ['stʌtə]
vi.&*vt.* if a machine stutters, it keeps making noise and does not work smoothly 时断时续地移动

trundle ['trʌndl]
vi.&*vt.* to move slowly along on wheels（使）滚动，旋转

undulate ['ʌndʒəˌleɪt]
vi.&*vt.* to occur in soft rounded shapes（使）起伏，（使）波动，呈波浪形

ferry ['ferɪ]
vt. to transport from one place to another by boat 航海，渡运

tsunami [tsuː'nɑːmɪ]
n. a cataclysm resulting from a destructive sea wave caused by an earthquake or volcanic eruption 海啸

potential energy
n. the mechanical energy that a body has by virtue of its position; stored energy 势能

kinetic [kɪ'netɪk]
adj. relating to the motion of material bodies and the forces associated therewith 运动的，动力（学）的

tubular ['tuːbjələ]
adj. made of tubes or in the form of a tube 管系组织的，管状的

aerodynamics [ˌeərəʊdaɪ'næmɪks]
n. the scientific study of how objects move through the air 空气动力学

fin [fɪn]
n. a winglike part that a fish uses in swimming 鳍状物，（汽车、飞机、炸弹上的）尾翼

inertia [ɪ'nɜːʃə]
n. the tendency of a body to maintain its state of rest or uniform motion unless acted upon by an external force 惯性，惰性，迟钝

winch [wɪntʃ]
vt. to pull or lift up with or as if with a winch 用绞车拉，用辘轳绞

propel [prə'pel]
vt. to move, drive, or push something forward 推进，推动，驱动

bulky ['bʌlkɪ]
adj. big and heavy 庞大的，笨重的，体积大的

municipality [mjʊ'nɪsə'pælətɪ]
n. an urban district having corporate status and powers of self-government 自治市，市政当局

feeder ['fiːdə]
n. a small road or railway line that takes traffic into a main road or railway 支路

scuttle ['skʌtl]
vi. to move quickly with short steps 快跑，急走

makeshift ['meɪkˌʃɪft]
n. something contrived to meet an urgent need or emergency 临时替代品

pedestrian [pɪ'destrɪən]
n. someone who is walking especially in a street or other places used by cars 步行者，行人

topographical [ˌtɒpə'græfɪkl]
adj. concerned with topography 地志的，地形学的

gradient ['greɪdiːənt]
n. a degree of slope, especially in a road or railway 梯度，（道路的）坡度

scrutinise ['skruːtɪnaɪz]
vi. & vt. to look at critically or searchingly, or in minute detail 详细检查，详审

albeit [ɔːl'biːɪt]
conj. even though 虽然，即使

glamour ['glæmə]
n. the attractive or exciting quality that something has because it is connected with wealth or success 魅力，迷人的美

Exercises

Questions 29—32

Complete each sentence with the correct ending from the list of endings below.
*Write the correct letter, **A—H** in blanks **29—32**.*

List of Endings

A it has no engine
B by aerodynamics and vertical curves
C its wheels catch a fin and it slows down
D by winching up
E it needs to be raised up to a certain height
F by turning potential energy into kinetic energy
G it travels between two sloping segments
H by its own inertia

29. The Eco-Ride works ____________.
30. When an Eco-Ride arrives at stations ____________.
31. The Eco-ride climbs up small inclines ____________.
32. Before the Eco-Ride begin to coast ____________.

29. ____________ 30. ____________ 31. ____________ 32. ____________

Questions 33—37

Answer the questions below. Choose ***NO MORE THAN FOUR WORDS*** *from the passage for each answer.*

33. What could the Eco-Ride train be expected to function in a couple of years?

____

34. What did Tohoku region suffer last year?

____

35. What do people, encouraged by test, endeavor to achieve with Eco-Ride?

____

36. What feature makes the Eco-Ride suited to undulating region?

____

37. In Takayuki Morikawa's point of view, what are the characteristics of Eco-Ride?

____

Questions 38—40

Translate the sentences from the passage into Chinese.

38. The lack of any engine makes carriages extremely light, so the energy required to propel them is small and the emissions low.

____

____

39. However, recently there are trains that are able to regenerate energy when braking or travelling along downhill gradients, so I think it is necessary to scrutinise which of the two is more efficient.

____

____

40. But for others, the simple fact that they are riding a roller coaster—albeit a slower one—gives Eco-Ride instant glamour.

____

____

Unit 10

Section A

Reading Passage 1

The Third Industrial Revolution

The first industrial revolution began in Britain in the late 18th century, with the mechanisation of the textile industry. Tasks previously done laboriously by hand in hundreds of weavers' cottages were brought together in a single cotton mill, and the factory was born. The second industrial revolution came in the early 20th century, when Henry Ford mastered the moving assembly line and ushered in the age of mass production. The first two industrial revolutions made people richer and more urban. Now a third revolution is under way. Manufacturing is going digital. As this week's special report argues, this could change not just business, but much else besides.

A number of remarkable technologies are converging: clever software, novel materials, more dexterous robots, new processes (notably three-dimensional printing) and a whole range of web-based services. The factory of the past was based on cranking out zillions of identical products: Ford famously said that car-buyers could have any colour they liked, as long as it was black. But the cost of producing much smaller batches of a wider variety, with each product tailored precisely to each customer's whims, is falling. The factory of the future will focus on mass customisation—and may look more like those weavers' cottages than Ford's assembly line.

Towards a Third Dimension

The old way of making things involved taking lots of parts and screwing or welding them together. Now a product can be designed on a computer and "printed" on a 3D printer, which creates a solid object by building up successive layers of material. The digital design can be tweaked with a few mouseclicks. The 3D printer can run unattended, and can make many things which are too complex for a traditional factory to handle. In time, these amazing machines may be able to make almost anything, anywhere—from your garage to an African village.

The applications of 3D printing are especially mind-boggling. Already, hearing aids and high-tech parts of military jets are being printed in customised shapes. The geography of supply chains will change. An engineer working in the middle of a desert who finds he lacks a certain tool no longer has to have it delivered from the nearest city. He can simply download the design and print it. The days when projects ground to a halt for want of a piece of kit, or when customers complained that they could no longer find spare parts for things they had bought, will one day seem quaint.

Other changes are nearly as momentous. New materials are lighter, stronger and more durable than the old ones. Carbon fibre is replacing steel and aluminium in products ranging from aeroplanes to mountain bikes. New techniques let engineers shape objects at a tiny scale. Nanotechnology is giving products enhanced features, such as bandages that help heal cuts, engines that run more efficiently and crockery that cleans more easily. Genetically engineered viruses are being developed to make items such as batteries. And with the internet allowing ever more designers to collaborate on new products, the barriers to entry are falling. Ford needed heaps of capital to build his colossal River Rouge factory; his modern equivalent can start with little besides a laptop and a hunger to invent.

Like all revolutions, this one will be disruptive. Digital technology has already rocked the media and retailing industries, just as cotton mills crushed hand looms and the Model T put farriers out of work. Many people will look at the factories of the future and shudder. They will not be full of grimy machines manned by men in oily overalls. Many will be squeaky clean—and almost deserted. Some carmakers already produce twice as many vehicles per employee as they did only a decade or so ago. Most jobs will not be on the factory floor but in the offices nearby, which will be full of designers, engineers, IT specialists, logistics experts, marketing staff and other professionals. The manufacturing jobs of the future will require more skills. Many dull, repetitive tasks will become obsolete: you no longer need riveters when a product has no rivets.

The revolution will affect not only how things are made, but where. Factories used to move to low-wage countries to curb labour costs. But labour costs are growing less and less important: a $499 first-generation iPad included only about $33 of manufacturing labour, of which the final assembly in China accounted for just $8. Offshore production is increasingly moving back to rich countries not because Chinese wages are rising, but because companies now want to be closer to their customers so that they can respond more quickly to changes in demand. And some products are so sophisticated that it helps to have the people who design them and the people who make them in the same place. The Boston Consulting

Group reckons that in areas such as transport, computers, fabricated metals and machinery, 10-30% of the goods that America now imports from China could be made at home by 2020, boosting American output by $20 billion–55 billion a year.

The Shock of the New

Consumers will have little difficulty adapting to the new age of better products, swiftly delivered. Governments, however, may find it harder. Their instinct is to protect industries and companies that already exist, not the upstarts that would destroy them. They shower old factories with subsidies and bully bosses who want to move production abroad. They spend billions backing the new technologies which they, in their wisdom, think will prevail. And they cling to a romantic belief that manufacturing is superior to services, let alone finance.

None of this makes sense. The lines between manufacturing and services are blurring. Rolls-Royce no longer sells jet engines; it sells the hours that each engine is actually thrusting an aeroplane through the sky. Governments have always been lousy at picking winners, and they are likely to become more so, as legions of entrepreneurs and tinkerers swap designs online, turn them into products at home and market them globally from a garage. As the revolution rages, governments should stick to the basics: better schools for a skilled workforce, clear rules and a level playing field for enterprises of all kinds. Leave the rest to the revolutionaries.

(Adapted from http://www.economist.com/node/21553017, anonymous)

Notes

- **Henry Ford** 亨利·福特（1863—1947），美国汽车工程师与企业家，福特汽车公司的建立者。
- **3D printing** 3D 打印，一种快速成型技术，以数字模型文件为基础，运用粉末状金属或塑料等可黏合材料，通过逐层打印的方式来构造物体。
- **Model T** 第一款被广泛使用的由汽油发动机驱动的汽车，1908 年至 1927 年由福特汽车公司大规模生产。
- **Boston Consulting Group** 波士顿咨询集团，一家全球性管理咨询公司。

New Words

converge [kən'vɜːdʒ]
vi. to move towards a place from different directions（线条、运动的物体等）汇于一点，聚集，人或车辆汇集

dexterous ['dekstərəs]
adj. very skilful and clever with their hands（身手）灵巧的，敏捷的

crank [kræŋk]
vt. to make an engine or machine move or function, especially by turning a handle（尤指用手摇曲柄）转动（或启动）

zillion ['zɪljən]
n. extremely large number 庞大的数字，无法计算的大数字

whim [hwɪm]
n. a wish to do or have something which seems to have no serious reason or purpose behind it, and often occurs suddenly 一时的兴致，突然的念头，幻想

customisation ['kʌstəmaɪzeɪʃən]
n. the act of making products according to requirements 用户化，定制化

tweak [twi:k]
vt. to improve a system or a design by making a slight change 稍稍调整（机器、系统等）

mind-boggling ['maɪndˌbɒglɪŋ]
adj. so large, complicated, or extreme that it is very hard to imagine 令人难以置信的

quaint [kweɪnt]
adj. attractive because it is unusual and rather old-fashioned 古旧的，少见的，古怪的

momentous [məʊ'mentəs]
adj. of a decision, event, or change that it is very important, often because of the effects that it will have in the future 重大的，重要的

aluminium [æljə'mɪnɪəm]
n. a lightweight metal used, for example, for making cooking equipment and aircraft parts 铝

nanotechnology ['nænəutek'nɒlədʒɪ]
n. the science of making or working with things that are so small that they can only be seen using a powerful microscope 纳米技术，毫微技术

crockery ['krɒkərɪ]
n. the plates, cups, saucers, and dishes that are used at meals 陶器，瓦罐

colossal [kə'lɒsəl]
adj. very large 巨大的

equivalent [ɪ'kwɪvələnt]
n. a person or thing equal to another in value or measure or force or effect or significance etc. 对等物

disruptive [dɪs'rʌptɪv]
adj. causing problem and preventing something from continuing in its usual way 分裂性的，破坏的，扰乱的

farrier ['færɪə]
n. a person who fits horseshoes onto horses 蹄铁匠

grimy ['graɪmɪ]
adj. very dirty 沾满污垢的，满是灰尘的，肮脏的

squeaky ['skwi:kɪ]
adj. of high-pitched sounds 吱吱响的，发轧声的

logistics [lə'dʒɪstɪks]
n. the practical arrangements that needed in order to make a plan that involves a lot of people or equipment successful 后勤

obsolete ['ɒbsəli:t]
adj. something no longer needed because something better has been invented 废弃的，老式的，已过时的

riveter ['rɪvɪtə]
n. a machine for driving rivets 打铆机，铆枪

fabricated ['fæbrɪkeɪtɪd]
vt. to invent information in order to deceive people 编造，伪造

upstart ['ʌpstɑ:t]
n. someone who behaves as if they are more important than they really are and who shows a lack of respect towards people who are more experienced or older 暴发户，新贵，傲慢自负的人

subsidy ['sʌbsɪdɪ]
n. money that is paid by a government or other authority in order to help an industry or business, or to pay for a public service 补贴，津贴，助学金，奖金

lousy ['laʊzɪ]
adj. of very bad quality 讨厌的，污秽的，非常糟糕的

legion ['li:dʒən]
n. a large group of people 众多，大量

tinkerer ['tɪŋkərə]
n. a person who enjoys fixing and experimenting with machines and their parts 喜欢捣鼓小器具、小发明的人

swap [swɒp]
vt. to something to someone and get something in return 替换，掉换（过来）

Phrases and Expressions

usher in	引领，开创
be under way	在进行中
crank out	制成
let alone	更不用说

Text Analysis

The passage is made up of three parts.

Part one consists of the first two paragraphs. It states that the third industrial revolution is under way. Paragraph 1 compares the third industrial revolution with the previous two. It's featured by digital manufacturing. Paragraph 2 is about the feature of the future factories in comparison with the first two. The factory of the future will focus on mass customization.

Part two is made up of five paragraphs, from Paragraph 3 to Paragraph 7. It's about the changes brought by the third industrial revolution. Paragraph 3 introduces 3D printing technology. A product can be designed on a computer and "printed" on a 3D printer, which creates a solid object by building up successive layers of material. Paragraph 4 illustrates that the applications of 3D printing are especially mind-boggling. Paragraph 5 states that other changes including new materials and new technologies are nearly as momentous. Paragraph 6 claims that the third industrial revolution will be disruptive. Factories of the future will be filled with various professionals and the manufacturing jobs of the future will require more skills. Paragraph 7 points out that the revolution will also affect the location of factories. Offshore production is increasingly moving back to rich countries.

Part three consists of the last two paragraphs, Paragraphs 8 & 9. It's about the government's role in the third industrial revolution. Paragraph 8 states that governments' instinct is to protect industries and companies that already exist, not the upstarts that would destroy them. Paragraph 9 points out what governments should do in the face of the third industrial revolution. They should stick to the basics: better schools for a skilled workforce, clear rules and a level playing field for enterprises of all kinds.

Word Roots

vers，vert 词根源于拉丁文 vertere（= to turn 转移，改变，转向），过去分词 versus

同根词：

converge	*v.*	聚集，人或车辆汇集

advertise	*v.*	做广告
anniversary	*n.*	周年纪念日
adverse	*adj.*	相反的，敌对的
adversity	*n.*	逆境，苦难
adversary	*n.*	对手，敌手
reverse	*v.*	倒转，逆转
controversial	*adj.*	争论的，好争论的
invert	*v.*	使反转，使倒转
diversity	*n.*	多样性
versatile	*adj.*	多方面的，多才多艺的

根据词根词缀猜下列词的词义：

1. subvert *v.* ______________
2. divert *v.* ______________
3. irreversible *adj.* ______________
4. introvert *n.* ______________
5. extrovert *n.* ______________
6. convert *v.* ______________

rupt 词根源于拉丁文 rumpere（= to break，to burst 打破）

同根词：

disruptive	*adj.*	分裂性的，破坏的
disrupt	*v.*	使分裂，使中断
disruption	*n.*	分裂，中断
abrupt	*v.*	突然的，不在意的
rupture	*n. & v.*	破裂，绝交

根据词根词缀猜下列词的词义：

7. bankruptcy *n.* ______________
8. corrupt *adj.* ______________
9. erupt *v.* ______________
10. incorrupt *adj.* ______________
11. interrupt *v.* ______________
12. irrupt *v.* ______________

mov，mob，mot 这三个词根源于拉丁文 movere（= to move 移动），mobillis（= movable 可移动的），motio（= movement 位移）

同根词：

remove	*v.*	移去，移动
mobile	*adj.*	可动的，易变
mobilize	*v.*	流通，动员
automobile	*n.*	汽车
demobilize	*v.*	遣散，改编，使复原
momentous	*adj.*	极重要的

根据词根词缀猜下列词的词义：

13. motivate *v.* ____________

14. motive *n.* ____________

15. demote *v.* ____________

16. emotion *n.* ____________

17. locomotive *n.* ____________

18. promote *v.* ____________

Synonyms

danger, risk, hazard, menace, peril, threat 这些名词均含有“危险，威胁”之意。

danger：含义广，普通用词，指能够造成伤害、损害或不利的任何情况。

risk：指有可能发生的危险，尤指主动进行某种活动或去碰运气而冒的危险。

hazard：指导致意外事件的危险。

menace：所指的危险性非常严重，表示使用暴力或造成破坏性的可能。

peril：指严重危险，尤其指迫在眉睫的死亡的危险，通常为复数。

threat：普通用词，语气弱于 menace，指任何给他人构成危险或威胁的事情或人。

Complete the following sentences with the proper form of the words listed above.

19. The escaped prisoners are considered as a __________ to the whole residential area.

20. There must be protection from radiation __________ to ensure the safety of local people.

21. There is no ___________ that the virus can be transferred from poultry to people.

22. It's reported that nearly 10,000 people are facing the ___________ of snow storm in Xinjiang.

23. The peace talks are now in ___________ of collapse.

24. Officials were confident that there had been no ___________ to public health.

believe, trust, confide, rely
这些动词均含有"相信，信任"之意。

believe：普通用词，常表示一种缓和、不太肯定的口气。

trust：指绝对相信或信赖某人。

confide：侧重忠诚可靠与可信赖，可告知秘密的。

rely：指在相信的基础上可进一步依靠，着重可靠性。

Complete the following sentences with the proper form of the words listed above.

25. When we were little babies, we ___________ heavily on what our parents said.

26. Jane had ___________ her secret to John, but he betrayed her trust.

27. You can always ___________ him since he is a man of his word.

28. Scientists ___________ a cure for the disease will be discovered soon.

Exercises

Questions 1—5

*Do the following statements agree with the information given in the passage? In brackets **1—5**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1. (　　) The third industrial revolution has been completed.

2. (　　) The factory of the future will appear more like Ford's assembly line.

3. (　　) With the application of 3D printing, people will be rarely bothered by the difficulty in finding parts for things they had purchased.

4. (　　) Digital technology has already driven the media and retailing industries bankrupt.

5. (   ) It will be easy for consumers to get used to the new age of better products and better services.

Questions 6—10

*Choose the correct letter **A, B, C** or **D**. Write the correct letter in blanks **6—10**.*

6. How can an engineer working in an isolated place get a certain tool that he needs in the third industrial revolution?
   A He has to fetch it from the city nearby.
   B He has to ask others to send it to him.
   C He can download it from the internet.
   D He can print it with 3D printing.

7. What does an entrepreneur in the third industrial revolution need to become as successful as Henry Ford?
   A Piles of money.
   B A modern factory.
   C A computer and a desire to create.
   D A laptop and hunger.

8. In the future factories, people may expect to find the following professionals EXCEPT __________.
   A IT specialists
   B technicians in greasy uniforms
   C logistics experts
   D marketing staff

9. In the future, it's advisable to have the products designers and producers in the same place because __________.
   A some products are very expensive
   B some products are very strange
   C some products are very complicated
   D some products are very large

10. What should the governments focus on in the age of the third industrial revolution?
   A Better education for entrepreneurs.
   B A playground for all workers.
   C Better education and fair rules of competition.
   D Investment.

6. __________ 7. __________ 8. __________ 9. __________ 10. __________

Questions 11—13

Translate the sentences from the passage into Chinese.

11. Some carmakers already produce twice as many vehicles per employee as they did only a decade or so ago.

____

____

12. And some products are so sophisticated that it helps to have the people who design them and the people who make them in the same place.

____

____

13. And they cling to a romantic belief that manufacturing is superior to services, let alone finance.

____

____

Section B

Reading Passage 2

Will Self-driving Cars Change the Rules of the Road?

Not long ago, self-driving cars seemed like science fiction. But Google is now operating so-called autonomous cars in California and Nevada, and last week at the annual Consumer Electronics Show in Las Vegas, Toyota and Audi unveiled prototypes for self-driving cars to sell to ordinary car buyers. (Google co-founder Sergey Brin said last year he expects his company to have them ready for the general public within five years.) In a report backing self-driving cars, the consulting firm KPMG and the Center for Automotive Research recently predicted that driving is "on the brink of a new technological revolution."

But as the momentum for self-driving cars grows, one question is getting little attention: Should they even be legal? And if they are, how will the laws of driving have to adapt? All our rules about driving—from who pays for a

speeding ticket to who is liable for a crash—are based on having a human behind the wheel. That is going to have to change.

There are some compelling reasons to support self-driving cars. Regular cars are inefficient: the average commuter spends 250 hours a year behind the wheel. They are dangerous. Car crashes are a leading cause of death for Americans ages 4 to 34 and cost some $300 billion a year. Google and other supporters believe that self-driving cars can make driving more efficient and safer by eliminating distracted driving and other human error. Google's self-driving cars have cameras on the top to look around them and computers to do the driving. Their safety record is impressive so far. In the first 300,000 miles, Google reported that its cars had not had a single accident. Last August, one got into a minor fender bender, but Google said it occurred while someone was manually driving it.

After heavy lobbying and campaign contributions, Google persuaded California and Nevada to enact laws legalizing self-driving cars. The California law breezed through the state legislature—it passed 37-0 in the senate and 74-2 in the assembly—and other states could soon follow. The Alliance of Automobile Manufacturers, which represents big carmakers like GM and Toyota, opposed the California law, fearing it would make it too easy for carmakers and individuals to modify cars to self-drive without the careful protections built in by Google.

That is a reasonable concern. If we are going to have self-driving cars, the technical specifications should be quite precise. Just because your neighbor Jeb is able to jerry-rig his car to drive itself using an old PC and some fishing tackle, that does not mean he should be allowed to.

As self-driving cars become more common, there will be a flood of new legal questions. If a self-driving car gets into an accident, the human who is "co-piloting" may not be fully at fault—he may even be an injured party. Whom should someone hit by a self-driving car be able to sue? The human in the self-driving car or the car's manufacturer? New laws will have to be written to sort all this out.

How involved—and how careful—are we going to expect the human co-pilot to be? As a Stanford Law School report asks, "Must the 'drivers' remain vigilant, their hands on the wheel and their eyes on the road? If not, what are they allowed to do inside or outside, the vehicle?" Can the human in the car drink? Text-message? Read a book? Not surprisingly, the insurance industry is particularly concerned and would like things to move slowly. Insurance

companies say all the rules of car insurance may need to be rewritten, with less of the liability put on those operating cars and more on those who manufacture them.

At the signing ceremony for California's self-driving-car law, Governor Jerry Brown was asked who is responsible when a self-driving car runs a red light. He answered: "I don't know—whoever owns the car, I would think. But we will work that out. That will be the easiest thing to work out." Google's Brin joked, "Self-driving cars don't run red lights."

Neither answer is sufficient. Self-driving cars should be legal—and they are likely to start showing up faster and in greater numbers than people expect. But if that is the case, we need to start thinking about the legal questions now. Given the high stakes involved in putting self-guided, self-propelled, high-speed vehicles on the road, "we will work that out" is not good enough.

(Adapted from http://ideas.time.com/2013/01/14/will-self-driving-cars-change-the-rules-of-the-road/, anonymous)

Notes

- **autonomous car** 无人驾驶汽车，自动车，也称为机器人车，拥有自动感应环境和无须人为输入的导航功能。未来无人驾驶汽车将被广泛使用。
- **Nevada law for self-driving car** 美国内华达州无人驾驶汽车法。2011 年 6 月，内华达州成为美国第一个通过了该法案的州，于 2012 年 3 月 1 日生效。同年 5 月该州颁发了第一辆无人驾驶汽车驾照。
- **Las Vegas** 拉斯维加斯，美国内华达州东南部一城市。
- **Toyota** 丰田公司，日本著名汽车公司。
- **Audi** 奥迪，德国大众汽车公司出产的轿车品牌名。
- **General Motors (GM)** 美国通用汽车公司

New Words

unveil [ʌn'veɪl]
vt. to show or tell people something that was previously kept secret 揭开，公布

prototype ['prəutətaɪp]
n. the first form that a new design of a car, machine etc. has 原型，雏形，蓝本

momentum [mə'mentəm]
n. force that increases the rate of development of a process; impetus 势头，动力，要素，契机

fender ['fendə]
n. a barrier that surrounds the wheels of a vehicle to block splashing water or mud（车辆的）挡泥板，防御物

bender ['bendə]
n. revelry in drinking; a merry drinking party（一段时间）狂饮作乐

manually ['mænjʊəlɪ]
adv. by hand 用手地，手工地

enact [ɪ'nækt]
vt. to (of the government) make or pass (a law) 制定法律，颁布

specification [ˌspesɪfɪ'keɪʃən]
n. any of the parts of a detailed plan or set of descriptions or directions 规格，说明书

jerry-rig ['dʒeriː'rɪg]
n. measures taken to deal with emergency 应急措施

liability [laɪə'bɪlɪtɪ]
n. responsibility for something 责任

Exercises

Questions 14—18

*Do the following statements agree with the information given in the passage? In brackets **14—18**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

14. (　　) Whether self-driving cars should be legal arouses much public concern.

15. (　　) Car crashes are a main reason of death for Americans ranging from 4 to 34 years old and cost some $300 billion annually.

16. (　　) It takes Google little effort to persuade California and Nevada to issue laws legalizing self-driving cars.

17. (　　) Owners of self-driving cars should be forbidden from modifying their cars by themselves.

18. (　　) Casual statements like “we will work that out” is inadequate to handle the legal problems associated with self-driving cars.

Questions 19—23

*Choose the correct letter **A**, **B**, **C** or **D**. Write the correct letter in blanks **19—23**.*

19. The following statements are the reasons to support self-driving cars EXCEPT __________.
    A regular cars are low in efficiency
    B regular cars are cause more accidents
    C self-driving cars can make driving more efficient and safer
    D self-driving cars can never meet traffic accidents

20. Last August, one got into a minor fender bender, but Google said it had happened while __________.
    A no one was driving it
    B a woman was driving it
    C the driver was drunk
    D a person was driving it by himself

21. Insurance companies say that __________.
    A all the rules of car insurance may need to be changed
    B those operating cars will have less responsibility
    C the car manufacturers will have more responsibility
    D All of the above

22. Who will be accused when a self-driving car runs a red light?
    A The car owner.
    B The car manufacturer.
    C Google.
    D Not mentioned.

23. Which of the following is NOT true of self-driving cars?
    A Self-guided.
    B Self-propelled.
    C High-speed.
    D Comfortable.

19. __________ 20. __________ 21. __________ 22. __________ 23. __________

Questions 24—26

Translate the sentences from the passage into Chinese.

24. All our rules about driving—from who pays for a speeding ticket to who is liable for a

crash—are based on having a human behind the wheel.

25. After heavy lobbying and campaign contributions, Google persuaded California and Nevada to enact laws legalizing self-driving cars.

26. Insurance companies say all the rules of car insurance may need to be rewritten, with less of the liability put on those operating cars and more on those who manufacture them.

Reading Passage 3

Outsourcing Safety

With the global outsourcing of domestic drug manufacturing, the need to ensure the quality and safety of medical products has never been greater. But recent events show that the US Food and Drug Administration (FDA) is not up to the task.

The FDA has been rocked by recent scandals; for example, contaminant-laced heparin and Salmonella contaminated peppers and peanut butter caused dozens of deaths last year. Similarly, in China, melamine-laced milk products were responsible for the deaths of at least six babies and the hospitalization of 300,000. These tragic events come on the heels of the distribution in Panama of cough syrup containing the poison diethylene glycol, which killed at least 100 people in 2006. Together, they underscore the urgent need to guarantee the safety of both domestic and imported food and medical products.

The issue is particularly pressing for drugs sold in the US. It is estimated that 80% of the active ingredients of prescription drugs sold in the US are now foreign made, raising the question of whether sufficient mechanisms are in place to safeguard imported pharmaceuticals. And the US is not alone in this trend to outsource drug manufacturing. In all of Europe, there remains a single factory that makes aspirin and only one that makes acetaminophen. But competing with China to produce aspirin, as with many other generics, is no

longer affordable, and both factories are slated to close.

The economics of outsourcing are hard to ignore: lower wages for foreign workers reduce production costs, and companies minimize capital outlays by using existing offshore infrastructure (that is, manufacturing plants) and expertise, thereby eliminating the expense of acquiring or maintaining these resources domestically. Of course, the cost savings derived from outsourcing are dependent on a strong dollar, and, with the recent rise in value of foreign currencies such as the Indian rupee against the US dollar, the drive to outsource may be partially—although perhaps only temporarily—mitigated.

Another incentive driving outsourcing is the minimal regulatory oversight of foreign drug factories compared with that of their domestic counterparts, which reduces the cost of adhering to regulatory requirements when medicines are made abroad. The FDA is supposed to inspect US pharmaceutical plants every two years. But the frequency of inspections of foreign plants is far lower—estimated at less than once every 13 years at the current rate—and the record-keeping of such inspections seems to be lax. Follow-up inspections to ensure that problems identified at foreign factories have been corrected can take four or five years, so there is little impetus to fix issues quickly. A recent New York Times report indicates that of the 714 drug factories in China that export products to the US, only 15 are inspected each year. In the case of the heparin scandal, the FDA had never inspected the factory that supplied the contaminated drug.

This oversight is assumed to not be an isolated incident. According to a report submitted to the US House of Representatives by the US Government Accountability Office (GAO) in 2007, the FDA does not know how many foreign drug factories export products to the US and must be inspected. One internal database lists the number as 3,000, whereas another lists it as 6,800. The true number is unknown. The two databases are not compatible, and so errors and duplications must be identified by hand. As a result, the internal accounting is so poor that the FDA does not know which factories have been inspected, and, if they have been inspected, when, nor does it know where many of these factories are or what they make. According to the *New York Times*, some of the problems may stem from translation errors, whereas others may stem from insufficient notification to the FDA of changes in names or locations of plants. The FDA does not employ translators for its inspections abroad and instead relies on those provided by the foreign company, a clear conflict of interest. But, these excuses aside, the central issue is the archaic system inherent in the FDA, the absence of automation and the lack of modern data management. The very

same issues were raised by the GAO in 1998. They have yet to be resolved.

The solution is not a return to domestic drug manufacturing. The US healthcare system is now entirely dependent on the foreign supply of drug products and does not have the manufacturing capability necessary to supply the country's needs. The process of rebuilding such capacity would take years and is not an economically viable option in today's world of outsourcing. Instead, the process of effective—rather than cursory—oversight must be restored, and ramifications must be established for drug importers to shoulder their part of the regulatory responsibility.

In response to some of the public outcry about recent national and international food and drug scandals, the FDA established in late 2008 and early 2009 three official outposts in China, two in India and one each in Costa Rica and Brussels. Their aim is to improve the compliance of foreign exporters with US regulations for food and drug safety. Although the offices are a good initial tactic, with only eight employees described as inspectors or senior technical experts assigned to the three locations in China, and thousands of food and drug manufacturing plants to monitor, the effort may fall short of its aims.

In January, legislation was introduced to overhaul the ability of the FDA to regulate the safety of food, drugs, medical devices and cosmetics. The Food and Drug Administration Globalization Act of 2009 would require all drug and device manufacturers providing products to the US to register annually with the FDA. Fees associated with the annual registration would be used to increase the frequency of inspections at foreign plants to match that of domestic inspections. The act would require that manufacturers test for contaminants in and ensure the integrity of their raw materials, improve the transparency and security of the drug supply chain to better identify sources of contamination and increase the responsibility of importers for the safety of their products. The act also proposes to increase the monetary and criminal penalties associated with failure to comply with the legislation. It is not clear that the act will be debated this year, but, given what is at stake, it should be a priority.

The FDA is in desperate need of modernization. Its staff numbers and its funding have not kept pace with the rate of globalization of the food and drug markets and the enormous increase in US imports that require regulatory oversight. In January, nine FDA scientists sent a letter to then President elect Obama's transition team, accusing the FDA of gross mismanagement, of catering to medical device manufacturers at the expense of safety and sound science, and of an atmosphere that discourages whistleblowers. The next FDA

commissioner will inherit an agency that is failing the American public in its duty to ensure the safety of domestic and imported food, drugs and medical devices. Let's hope that the new US administration can find someone up to this daunting task.

(Adapted from http://www.nature.com/nm/journal/v15/n3/full/nm0309-221.html, anonymous)

Notes

- **Food and Drug Administration** (FDA) 食品和药物管理局，隶属于美国卫生与公众服务部，为美国联邦执行部门之一，其职责是保护和促进公共健康卫生。
- **Government Accountability Office (GAO)** 总审计局，美国政府立法机构的一部分，是美国国会集审计、评估和调查为一体的权力机构。
- **Costa Rica** 哥斯达黎加，拉丁美洲国家。
- **Brussels** 布鲁塞尔，比利时的首都。

New Words

outsourcing ['aʊtˌsɔːsɪŋ]
n. obtain goods or services from an outside supplier 外购，外部采办

contaminant [kən'tæmɪnənt]
n. a substance that makes something dirty 污染物，致污物

lace [leɪs]
vt. to add alcohol to (beverages) 给（饮料等）掺（少量的酒、药、毒药等）

heparin ['hepərɪn]
n. a polysaccharide produced in basophile (especially in the lung and liver) and that inhibits the activity of thrombin in coagulation of the blood 肝磷脂，肝素

salmonella [sælmə'nelə]
n. a kind bacteria; a disease caused by this bacteria in food 沙门（氏）菌，沙门菌病

melamine ['meləmiːn]
n. a white crystalline organic base, used mainly in making melamine resins 三聚氰胺

syrup ['sɪrəp]
n. a sweet liquid made by cooking sugar with water 糖浆，糖汁，糖浆类药品

diethylene [daɪ'eθɪˌlin]
n. 二次乙基

glycol ['glaɪkɒl]
n. 甘醇，乙二醇

underscore [ʌndə'skɔː]
vt. to emphasize the fact that something is important or true 强调

pharmaceutical [ˌfɑːmə'suːtɪkəl]
n. a drug or medicine that is prepared or dispensed in pharmacies and used in medical treatment 药物

acetaminophen [əˌsiːtə'mɪnəfen]
n. 醋氨酚，对乙酰氨基酚，扑热息痛

generic [dʒə'nerɪk]
n. any product that can be sold without a brand name 无商标的药品

slate [sleɪt]
vt. to defeat 击败

outlay ['aʊtleɪ]
n. the amount of money you have to be spent in order to buy something or start a project 花费，费用

mitigate ['mɪtɪgeɪt]
vt. to make something less unpleasant, serious, or painful 使缓和，使减轻，使平息

incentive [ɪn'sentɪv]
n. something which encourages one to greater activity 动机，刺激，诱因

adhere [əd'hɪə]
vi. to stick firmly 黏附，附着，坚持

lax [læks]
adj. not careful or strict about maintaining high standards 松弛的，松懈的，不严格的

impetus ['ɪmpɪtəs]
n. the force of making something moving 动力，促进

duplication [djuːplɪ'keɪʃən]
n. copy or the repeation of something in exactly the same way 重复，复本，成倍

archaic [ɑː'keɪɪk]
adj. extremely old or extremely old-fashioned 古代的，过时的

cursory ['kɜːsərɪ]
adj. brief and not paying much attention to detail 粗略的，草率的，仓促的

ramification [ˌræmɪfɪ'keɪʃən]
n. an additional result of something, especially ones which are not obvious at first 衍生物，结果

outcry ['aʊtkraɪ]
n. a reaction of strong disapproval and anger shown by the public or media about a

recent event 高声叫喊，尖叫，公开反对，强烈抗议

outpost ['aʊtpəʊst]
n. a small group of buildings used for trading or military purposes, either in a distant part of your own country or in a foreign country 前哨，前哨基地

compliance [kəm'plaɪəns]
n. when someone obeys a rule, agreement, or demand 服从，听从，承诺

tactic ['tæktɪk]
n. a method that you use to achieve something 手段，策略，战术，战略

overhaul [əʊvə'hɔːl]
vt. to change a system or method in order to improve it 大修，彻底检修，全面检查

whistleblower ['wɪsəlˌbləʊə]
n. someone who finds out that the organization they are working for is doing something immoral or illegal and tells the authorities or the public about it 告发者，检举者

daunting [dɔːntɪŋ]
adj. frightening in a way that makes you feel less confident 令人畏惧的，使人气馁的，令人却步的

Phrases and Expressions

fall short of	达不到，不符合
at stake	危险，濒于险境，处于成败关头
cater to	迎合，面向

Exercises

Questions 27—31

Do the following statements agree with the information given in the passage? In brackets ***27–31****, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

27. (　　　) The US is the only country that outsources drug manufacturing.

28. (　　　) It's reported by *New York Times* that at least 15 of the 714 Chinese drug

factories are checked up annually when exporting products to the US.

29. ( ) The FDA hires translators for its inspections overseas and also relies on those provided by the foreign company.

30. ( ) To resolve the problem of inadequate inspection, the US should go back to domestic drug manufacturing.

31. ( ) The three official FDA outposts in China with the eight employees may not come up to its aims.

Questions 32—36

*Complete the sentences below. Choose **ONE WORD ONLY** from the passage for each answer.*

32. In China, melamine-laced milk products resulted in the deaths of at least six babies and the ____________ of 300,000.

33. The FDA should ____________ US pharmaceutical factories every two years.

34. Money paid by foreign drug manufacturers for registration with the FDA would be used to raise the ____________ of inspections at foreign factories.

35. The Food and Drug Administration Globalization Act of 2009 suggests increasing the monetary and criminal ____________ related to failure to abide by the law.

36. The numbers of FDA employees and its financial strength have not kept up with the speed of ____________ of the food and drug markets and the great increase in US imports that require supervision.

Questions 37—39

Translate the sentences from the passage into Chinese.

37. But the frequency of inspections of foreign plants is far lower—estimated at less than once every 13 years at the current rate—and the record-keeping of such inspections seems to be lax.

____

____

38. The internal accounting is so poor that the FDA does not know which factories have been inspected, and, if they have been inspected, when, nor does it know where many of these factories are or what they make.

____

____

39. The US healthcare system is now entirely dependent on the foreign supply of drug products and does not have the manufacturing capability necessary to supply the country's needs.

____

____

Unit 11

Section A

Reading Passage 1

Reading the Writing on Pompeii's Walls

Rebecca Benefiel stepped into the tiny dark room on the first floor of the House of Maius Castricius. Mosquitoes whined. Huge moths flapped around her head. And her flashlight revealed a desiccated corpse that looked as if it was struggling to rise from the floor. Nonetheless, she moved closer to the walls and searched for aberrations in the stucco. She soon found what she was looking for: a string of names and a cluster of numbers, part of the vibrant graffiti chitchat carried on by the citizens of Pompeii before Mount Vesuvius erupted in A.D. 79 and buried their city in a light pumice stone called lapilli.

"There are a few hazards to this work," laughs Benefiel, a 35-year old classicist from Washington and Lee University who has spent part of the past six summers in Pompeii. "Sometimes the guards forget to let me out of the buildings at the end of the day!"

Regardless, she's always eager to return.

Vesuvius dumped ashes and lapilli on Pompeii for 36 hours, sealing the entire city up to an average height of 20 feet. Since the 18th century, archaeologists have excavated about two-thirds, including some 109 acres of public buildings, stores and homes. The city's well-preserved first level has given archaeologists, historians and classicists an unparalleled view of the ancient world, brought to a halt in the middle of an ordinary day.

From the very beginning, archaeologists noticed copious amounts of graffiti on the outsides of buildings. In the late 1800s, scholars began making careful copies of Latin inscriptions throughout the ancient Roman world, including Pompeii, and cataloging them. This effort is a boon to scholars like Benefiel, since more than 90 percent of Pompeii's recorded graffiti have since been erased by exposure to the elements.

Even though she studies this vast collection of inscriptions, Benefiel prefers to wander the ancient city and examine the remaining graffiti in context. Much of what remains is on protected interior walls, where servants, visitors and others took sharp instruments to the stucco and left their mark. "The graffiti would have been much more visible then than they are now," she says. "Many of these walls were brightly painted and highly decorated, and the graffiti let the underlying white plaster show through."

In the ancient Roman world, graffiti was a respected form of writing—often interactive–not the kind of defacement we now see on rocky cliffs and bathroom stalls. Inside elite dwellings like that of Maius Castricius—a four-story home with panoramic windows overlooking the Bay of Naples that was excavated in the 1960s—she's examined 85 graffiti. Some were greetings from friends, carefully incised around the edges of frescoes in the home's finest room. In a stairwell, people took turns quoting popular poems and adding their own clever twists. In other places, the graffiti include drawings: a boat, a peacock, a leaping deer.

The 19th century effort to document ancient graffiti notwithstanding, scholars have historically ignored the phenomenon. The prevailing attitude was expressed by August Mau in 1899, who wrote, "The people with whom we should most eagerly desire to come into contact, the cultivated men and women of the ancient city, were not accustomed to scratch their names upon stucco or to confide their reflections and experiences to the surface of a wall." But Benefiel's observations show the opposite. "Everyone was doing it," she says.

Contemporary scholars have been drawn to the study of graffiti, interested to hear the voices of the non-elite and marginal groups that earlier scholars spurned and then surprised to learn that the practice of graffiti was widespread among all groups across the ancient world. Today, graffiti is valued for the nuance it adds to our understanding of historical periods.

In the past four years, there have been four international conferences devoted to ancient and historic graffiti. One, at England's University of Leicester organized by scholars Claire Taylor and Jennifer Baird in 2008, drew so many participants that there wasn't space for all of them. Taylor and Baird have edited a book that sprang from that conference called Ancient Graffiti in Context, which will be published in September. On the book's introductory page, an epigram taken from a wall in Pompeii speaks to the multitude of graffiti in the ancient world: "I'm amazed, O wall, that you have not fallen in ruins, you who support the tediousness of so many writers."

"Graffiti is often produced very spontaneously, with less thought than Virgil or the

epic poetry," says Taylor, a lecturer in Greek history at Trinity College in Dublin. "It gives us a different picture of ancient society."

Pablo Ozcáriz, a lecturer in ancient history at Madrid's Universidad Rey Juan Carlos, has found thousands of medieval graffiti in the Cathedral of Pamplona and at the Abbey of La Olivia in Navarre. Taken as a whole, they often offer a more realistic underpinning to official histories. "It's as if someone asks us to write two diaries," Ozcáriz explains. "One will be published as a very important book and the other will be just for me. The first may be more beautiful, but the second will be more sincere."

Benefiel's study of Pompeii's graffiti has revealed a number of surprises. Based on the graffiti found on both exterior walls and in kitchens and servant rooms, she surmises that the emperor Nero was much more popular than we tend to think (but not so much after he kicked his pregnant wife). She's found that declarations of love were every bit as common then as they are today and that it was acceptable for visitors to carve their opinions about the city into its walls. She's discovered that the people of Pompeii loved displaying their cleverness via graffiti, from poetry contests to playful recombinations of the letters that form Roman numerals.

And she's found that Pompeians expressed far more goodwill than ill will. "They were much nicer in their graffiti than we are," she says. "There are lots of pairings with the word 'felicter,' which means 'happily.' When you pair it with someone's name, it means you're hoping things go well for that person. There are lots of graffiti that say 'Felicter Pompeii,' wishing the whole town well."

(Adapted from http://www.smithsonianmag.com/history/reading-the-writing-on-pompeiis-walls-1969367/?no-ist, written by Kristin Ohlson)

Notes

- **Pompeii** 庞贝古城，古罗马城市，位于意大利西南沿海坎帕尼亚地区。公元 79 年 10 月 24 日，维苏威火山喷发，把历史悠久的庞贝埋在火山灰下，却因此保留了大量古罗马帝国的建筑遗迹和艺术文物，成为世界上最为著名的古城遗址。
- **Emperor Nero** 尼禄·克劳狄乌斯·德鲁苏斯·日耳曼尼库斯（Nero Claudius Drusus Germanicus），古罗马帝国的皇帝，54—68 年在位，是罗马帝国朱里亚·克劳狄王朝的最后一任皇帝。
- **Mount Vesuvius** 维苏威火山，意大利西南部的一座活火山。

New Words

whine [waɪn]
vi. to make a long, high-pitched noise, especially one which sounds sad or unpleasant

发出哀叫声，哼哼唧唧地说，发呜呜声

flap [flæp]

vi. & *vt.* to move quickly up and down or from side to side 上下或左右移动、摆动，振翅而飞

desiccated ['desɪkeɪtɪd]

adj. having lost all the moisture 干的，水分全失的

aberration [æbə'reɪʃən]

n. an incident or way of behaving that is not typical 偏差，差错，偶发事件

stucco ['stʌkəʊ]

n. a type of plaster used for covering walls and decorating ceilings 粉饰灰泥

cluster ['klʌstə]

n. a small group of people or things close together 丛，簇，串，群

graffiti [grə'fiːtɪ]

n. words or pictures that are written or drawn on walls or posters 在墙上的乱涂乱写（graffito 的复数形式）

chitchat ['tʃɪttʃæt]

n. informal talk about things that are not very important 闲谈，聊天

pumice ['pʌmɪs]

n. a kind of grey stone from a volcano and is very light in weight 浮岩，浮石

lapilli [lə'pɪlaɪ]

n. small pieces of lawa thrown from a volcano 火山砾（lapillus 的名词复数）

excavate ['ekskəveɪt]

vt. if archaeologists or scientists excavate a area of land, they dig carefully to find ancient objects, bones, etc. 挖掘，发掘

copious ['kəʊpɪəs]

adj. existing or being produced in a large quantifies 丰富的，大量的

boon [buːn]

n. something that is very useful and makes life better or easier 恩惠，福利，给生活带来方便的事物

underlying [ʌndə'laɪɪŋ]

adj. of an object, event, or situation are not obvious, and difficult to discover or reveal 表面下的，深层的

defacement [dɪ'feɪsmənt]

n. the act of damaging the appearance or surface of something 毁损，磨灭

stall [stɔːl]
n. small area set off by walls for special use（房间内的）小隔间

panoramic [ˌpænə'ræmɪk]
adj. an impressive view of a wide area of land 全景的，全貌的

incise [ɪn'saɪz]
vt. to cut into the surface of the object with a sharp instrument（在表面）雕，刻

fresco ['freskəʊ]
n. a picture painted on a plastered wall when the plaster is still wet 壁画，湿壁画

stairwell ['steəwel]
n. the part of a building that contains the staircase 楼梯井

notwithstanding [nɒtwɪð'stændɪŋ]
adv. despite anything to the contrary (usually following a concession) 尽管如此，仍然，还是

confide [kən'faɪd]
vt. to tell something that is secret or private to someone you trust 吐露（秘密、心事等），托付

spurn [spɜːn]
vt. to reject a person or something with contempt 蔑视，唾弃

nuance ['njuːɑːns]
n. a small difference in sound, feeling, appearance, or meaning 细微差别，细微的表情

multitude ['mʌltɪtjuːd]
n. a very large number of things or people 大量，许多

underpinning ['ʌndəpɪnɪŋ]
n. a structure of masonry, concrete, etc., placed beneath a wall to provide support 基础材料，（学说、理论等的）基础

surmise [sə'maɪz]
vt. to guess something from the available evidence, although you do not know for certain 推测，猜测，臆测

recombination [riːˌkɒmbɪ'neɪʃən]
n. combining or being combined together again 再结合，再化合

Text Analysis

The passage can be roughly divided into two parts.

Part one is made up of six paragraphs, from Paragraph 1 to Paragraph 6. This part is

about the archaeological efforts made about the buried city of Pompeii, especially its graffiti. Paragraph 1: Rebecca Benefiel found evidence of the vibrant graffiti chitchat carried on by the citizens of Pompeii before the city was buried. Paragraph 2: There are a few hazards to her work. Paragraph 3: Regardless, she's always eager to return. Paragraph 4: The city's well-preserved first level has given archaeologists, historians and classicists an unparalleled view of the ancient world. Paragraph 5: Archaeologists noticed copious amounts of graffiti on the outsides of buildings and made copies of Latin inscriptions which benefit scholars like Benefiel. Paragraph 6: Benefiel prefers to wander the ancient city and examine the remaining graffiti in context.

Part two consists of the rest of the passage, from Paragraph 7 to Paragraph 14. This part is about the archaeological findings about the graffiti on Pompeii's walls. Paragraph 7 to Paragraph 9 point out that graffiti was a respected form of writing. Paragraph 7: In the ancient Roman world, graffiti was a respected form of writing—often interactive. Paragraph 8: Benefiel found that everyone was writing graffiti. Paragraph 9: Contemporary scholars learn that the practice of graffiti was widespread among all groups across the ancient world. Paragraph 10 to Paragraph 12 are about other findings about graffiti. Paragraph 10: In the past four years, there have been four international conferences devoted to ancient and historic graffiti. Paragraph 11: One lecturer found that graffiti is often produced very spontaneously. Paragraph 12: Another lecturer found thousands of medieval graffiti which often offer a more realistic underpinning to official histories. Paragraphs 13 & 14 are about Benefiel's findings about the graffiti. Paragraph 13: Benefiel found that the emperor Nero was more popular, declarations of love were common, and Pompeians loved displaying their cleverness via graffiti. Paragraph 14: Benefiel found that Pompeians expressed far more goodwill than ill will.

Word Roots

cide，cise 词根源于拉丁文 caedere（= to cut 切）

同根词：

decisive	*adj.*	决定性的，果决的
precise	*adj.*	精确的，考究的
suicide	*n.&v.*	自杀
concise	*adj.*	简明的，简洁的
incise	*v.*	切割，雕

根据词根词缀猜下列词的词义：

1. excise *v.* ____________
2. fratricide *v.* ____________

3. incisive	*v.*	________
4. insecticide	*n.*	________
5. matricide	*n.*	________
6. patricide	*n.*	________

miss，mit 词根源于拉丁文 mittere（= to send 送，to throw 投掷），过去分词为 missus

同根词：

surmise	*v.*	推测，猜测
missile	*adj.*	可发射的
	n.	导弹
mission	*n.*	使命；使节团
admit	*v.*	承认
commit	*v.*	委托，犯（罪）
promise	*v.&n.*	答应，承诺
compromise	*v.*	妥协，危及
permit	*v.&n.*	许可，许可书；证明书

根据词根词缀猜下列词的词义：

7. demise	*v.*	________
8. dismiss	*v.*	________
9. emit	*v.*	________
10. emissary	*n.*	________
11. premise	*n.&v.*	________
12. transmit	*v.*	________

number，numer 词根源于拉丁文 numerus（=number 数，to count 计数）

同根词：

numberless	*adj.*	无数的；很多的
numerable	*adj.*	可数的；可计数的
numeral	*n.*	数字
	adj.	数字的
numerate	*v.*	数；计算

根据词根词缀猜下列词的词义：

13. numerical	*adj.*	________
14. numerous	*adj.*	________

15. enumerate *v.* ______________________

16. innumerable *adj.* ______________________

17. supernumerary *adj.* ______________________

Synonyms

appear, emerge, show, loom
这些动词均有“出现”之意。

appear：强调公开露面，被看见，指某人或某物突然或首次进入视线。

emerge：强调缓慢出现的过程，尤其指某人或某物从被遮盖住的地方显示出来，常用短语 emerge from。

show：显示，表明，证明；语气较强。

loom：指朦胧出现，（庞然大物或模糊之物）赫然出现，暗含令人惊恐之意。

Complete the following sentences with the proper form of the words listed above.

18. The doors opened and people began to ____________ into the street.

19. Cracks began to ____________ in the ceiling.

20. The government is denying that a crisis is ____________.

21. The test results ____________ that he could not have committed the murder.

22. The country is slowly ____________ from the economic recession.

23. He promised to be here at four o'clock but didn't ____________ until six.

24. Suddenly the mountains ____________ up out of the mist.

cruel, brutal, inhuman, savage, barbarous, fierce
这些形容词均有“残忍的，野蛮的”之意。

cruel：一般用词，指行动或态度的残忍，强调给他人或动物造成伤痛或令其痛苦。

brutal：指极端的残忍，强调无情或缺乏同情心，含不择手段的意味。

inhuman：着重缺乏同情心、仁爱等人类特有的良好的品质。

savage：指缺乏文明人应有的教养，尤指在动怒或冲动时表现出的粗野蛮横，含野蛮意味。可引申为粗暴地批评他人。

barbarous：专指只有原始或未开化的人才会有的残忍行为。

fierce：指天性凶恶，令人害怕；引申为（感情或行动）激烈的，狂热的。

Complete the following sentences with the proper form of the words listed above.

25. She wrote a __________ review of the book.
26. The public condemned strongly their __________ treatment of women and children in the war time.
27. Now we are facing __________ competition from overseas competitors that never happened before.
28. The prisoners are subjected to __________ treatment in some prisons.
29. How could you be so __________ to someone who never did any harm to you.
30. The government instituted the reform in a __________ and disorganized manner.

Exercises

Questions 1—5

*Choose the correct letter **A**, **B**, **C** or **D**. Write the correct letter in blanks **1–5**.*

1. What happened to Pompeii in A.D. 79?
   A It was invaded.
   B It was burnt down in a fire.
   C It was covered by volcanic eruptions.
   D It was destroyed in an earthquake.

2. What happened to Pompeii's recorded graffiti?
   A They were repainted.
   B They were stolen.
   C They were copied.
   D Most of them have faded.

3. Modern scholars discovered that the practice of graffiti was __________.
   A the hobby of elites
   B prohibited at that time
   C encouraged at that time
   D popular with all groups

4. Which is NOT Benefiel's finding?
   A People in Pompeii expressed far more evil wishes than good ones.
   B Announcements of love were as common then as they are today.

C Visitors were allowed to carve their views on the city into its walls.

D Pompeians liked showing their smartness through graffiti.

5. When "felicter" is put before a person's name, it suggests ___________.

A one's love for that person

B wishing things run smoothly for that person

C one's respect for that person

D cursing that person

1. __________ 2. __________ 3. __________ 4. __________ 5. __________

Question 6—10

Complete the sentences below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*

6. In the late 1800s, scholars cautiously started copying ___________ in all parts of the ancient Roman world.

7. In the old Roman times, graffiti was a ___________ kind of writing.

8. Some of the graffito in Maius Castricius's home were ___________ from friends.

9. Benfiel's observations show that the ___________ men and women of the ancient city were not used to writing their names upon stucco.

10. Medieval graffiti in the Cathedral of Pamplona and at the Abbey of La Olivia in Navarre often provided official histories with ___________.

Questions 11—13

Translate the sentences from the passage into Chinese.

11. From the very beginning, archaeologists noticed copious amounts of graffiti on the outsides of buildings.

____

____

12. In the past four years, there have been four international conferences devoted to ancient and historic graffiti.

____

____

13. Based on the graffiti found on both exterior walls and in kitchens and servant rooms, she

surmises that the emperor Nero was much more popular than we tend to think.

____

____

Section B

Reading Passage 2

A Key Tool for Saving Our Oceans

A Over the past 20 years, scientists have been assembling compelling data that show the world's oceans are in deep trouble. Once-abundant species are disappearing, habitats are being destroyed, and fisheries are collapsing across the globe. For example, studies estimate that biomass of tunas and billfish have decreased by over 90% lower than in preindustrial fishing levels.

B A growing number of studies are also showing that marine protected areas (MPAs) can safeguard habitats from destructive fishing, and well-located and strongly protected MPAs increase species diversity, abundance and average size in many species. The benefits of MPAs include restoring the essential services that functioning marine ecosystems provide and improving fishing by enhancing fish populations outside MPAs .

C "In the short term, there are two kinds of benefits from protecting marine areas," says Elliott Norse, Founder and Chief Scientist of the Marine Conservation Institute. "First, within MPAs, the diversity of species, average size of many groups of organisms and total biomass generally increase. Second, MPAs export eggs, larvae, young and adults of living things into surrounding areas. But these effects are seen primarily in strongly protected areas, such as no-take marine reserves. Less-protected areas show far fewer benefits, if any," he added.

D A recent report to the UN Meeting of Biodiversity in Hyderabad, India found that roughly 2.3% of the ocean is designated as a Marine Protected Area (MPA). Moreover, the report suggested that at the current rate of MPA implementation, global coverage would reach about 10% in 10 years.

E The most recent rise in MPAs is largely attributed to the establishment or

expansion of several colossal ones, including:

- UK-controlled Chagos archipelago—545 thousand sq km MPA
- Australia—2.7 mil sq km increase in Great Barrier Reef MPA
- Cook Islands plan for a 1.1 million sq km MPA
- New Caledonia plan—1.4 million sq km MPA

These areas range from strongly protected to existing only on paper. Paper parks are not MPAs.

F Other analysts that filter out bad data (e.g., MPAs that are on land or in freshwaters) or don't include MPAs that don't meet even the weakest definition of "protected" have lower estimates of MPA coverage (e.g. MPAtlas.org). But overestimating MPA coverage is not the most important reason why people overestimate adequacy of the world's MPAs. A bigger reason is that many of the world's MPAs do not actually protect against the greatest threat facing marine species: fishing! For example, many MPAs prevent oil and gas exploration, but do not prevent the removal of wildlife from the ocean. This issue is highlighted in a study by Mora et al. that examined the effectiveness of MPAs on coral reefs. They found that about 18.7% of the world's coral reefs fell within an MPA; but less than 0.1% of the reefs were managed in a way that prevented fishing or poaching within MPA boundaries. Although these figures are outdated, the message is still clear—although MPA numbers and area are on the rise, the great majority of MPAs don't prevent fishing or habitat damage caused by fishing. And that's crucial because fishes (from the sharks, tunas and groupers at the top of the ecological pyramid to the small fishes near the bottom) are major drivers of marine ecosystem processes. Remove them and you've started and uncontrolled experiment that quite probably will dangerously alter marine ecosystem services we humans need.

G MPAs are the way we save fishes, which are the oceans' version of seed corn. MPAs allow us to save the life forms that will everything evolution has shaped them to do to keep the world's oceans hospitable for humankind.

H Marine reserves (= no-take marine reserves) are a type of MPA that prohibits all extractive activities, including fishing. Reserves significantly rebuild fish biomass in overfished areas. A great example is Cabo Pulmo National Park (CPNP) in the Gulf of California, Mexico. In 2011, Aburto-Oropeza and colleagues published a paper that compared fish biomass among no-take reserves, MPAs that permitted some fishing and open access areas. The study found that four years after establishment of the reserve, there were no significant differences in fish biomass between the most-

protected and least-protected areas. However, ten years after establishing the reserve, there was a 463% increase in total fish biomass at the CPNP reserve, including an 11-fold increase in the biomass of top predators! Moreover, fish biomass did not significantly change in other MPAs or open access areas. Not surprisingly, the study also found that the recovery of fish biomass inside CPNP generated significant economic benefits for the local community.

I So what about creating a global system of strongly protected MPAs that saves marine life and improves fishing? There are lots of models. For example, a growing number of studies suggest that establishing a no-take marine reserve surrounded by an MPA buffer is a useful place-based management strategy.

(Adapted from http://newswatch.nationalgeographic.com/2012/12/14/73880/, anonymous)

Notes

- **MPA** (Marine Protected Areas) 海洋保护区。海洋保护区的概念于 1962 年世界国家公园大会 (World Conference of National Parks) 首次被提出。至 2010 年，全球已经有 5880 多个海洋保护区，占世界海洋总面积的 1.17%。
- **Chagos** 查戈斯群岛，全称 Archipelago，英属印度洋领地，在印度洋中部，面积约 60 平方公里。
- **Cook Islands** 库克群岛，位在南太平洋上，介于法属波利尼西亚与斐济之间，由 15 个岛屿组成。
- **New Caledonia** 新喀里多尼亚，位于南回归线附近，处于南太平洋，距澳大利亚昆士兰东岸 1500 公里处。

New Words

compelling [kəm'pelɪŋ]
adj. extremely interesting or exciting 扣人心弦的，非常强烈的

fishery ['fɪʃərɪ]
n. the fishing industry; a part of the sea where fish are caught as a business 渔业，水产业，渔场

biomass ['baɪəʊmæs]
n. the total mass of living matter in a given unit area（单位面积或体积内）生物的数量

tuna ['tjuːnə]
n. a large sea fish caught for food 金枪鱼

billfish ['bɪlfɪʃ]

n. primitive predaceous North American fish covered with hard scales and having long jaws with needlelike teeth 长枪鱼或梭鱼的一种，任何有长嘴的鱼类

preindustrial [ˌpriːɪn'dʌstrɪəl]

adj. happening before industrial age 未工业化的，工业化前的

ecosystem ['iːkəʊsɪstəm]

n. a system formed by the interaction of a community of organisms with their physical environment 生态系统

larvae ['lɑːviː]

n. the immature free-living form of most invertebrates and amphibians and fish which at hatching from the egg（昆虫的）幼虫，幼体（ larva 的复数 ）

designate ['dezɪgneɪt]

vt. to choose someone or something for a particular job or purpose 指明，指定

archipelago [ˌɑːkɪ'peləgəʊ]

n. a group of many islands in a large body of water 群岛，列岛

poaching ['pəʊtʃɪŋ]

n. the illegal catching or shooting of animals, birds, or fish, especially on private land without permission 非法狩猎，偷猎

grouper ['gruːpə]

n. flesh of a saltwater fish similar to sea bass 鲶科鱼

extractive [ɪk'stræktɪv]

adj. able to be removed from somewhere, especially by pulling 引得出的，抽取的

buffer ['bʌfə]

n. an instrument, person, or area that reduces shock due to an impact 起缓冲作用的人（或物），缓冲区

Exercises

Questions 14—19

*The passage has eight paragraphs, **A—I**. Match each item listed below with the paragraph(s) in which it is mentioned.*

*Write the correct letter, **A—I**, in blanks **14—19**.*

NB: You may use any letter more than once.

14. the benefits of MPAs

15. oceans are in deep trouble

16. the establishment of big MPAs

17. two benefits of MPAs in the short term

18. a report about recent and future MPAs construction

19. one function of marine reserve

14. ________ 15. ________ 16. ________ 17. ________ 18. ________ 19. ________

Questions 20—24

*Do the following statements agree with the information given in the passage? In brackets **20—24**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

20. (   ) MPAs can protect the habitats from devastating fishing.

21. (   ) The benefits of MPAs are mainly found in strongly protected areas.

22. (   ) The most recent increase in MPAs is mainly due to the establishment or expansion of four big MPAs.

23. (   ) Most of the MPAs don't stop fishing or habitat damage as a result of fishing.

24. (   ) According to Aburto-Oropez and colleagues' study, four years after establishment of the reserve, there were great differences in fish biomass between the most-protected and least-protected areas.

Questions 25—27

Translate the sentences from the passage into Chinese.

25. Over the past 20 years, scientists have been assembling compelling data that show the world's oceans are in deep trouble.

____

____

26. Once-abundant species are disappearing, habitats are being destroyed, and fisheries are collapsing across the globe.

____

____

27. Although these figures are outdated, the message is still clear—although MPA numbers and area are on the rise, the great majority of MPAs don't prevent fishing or habitat damage caused by fishing.

____

____

Reading Passage 3

The End of the Line

Josh Goldman runs a fish farm, but the hangar-size facility in the western Massachusetts town of Turners Falls looks a lot less like a farm than a factory. Thousands of one-third-pound barramundi—an omnivorous fish native to Southeast Asia and Australia—swim in a 36-ft.-diameter tank that resembles a supersize kiddie pool. They spend their days fattening up on feed pellets under the watchful eyes of factory workers-farmers, if you must—who grade them for size. After several weeks of careful feeding, the fish are moved via an industrial waterslide—the pescalator, Goldman calls it—to a larger tank in the plant's next cavernous room. The assembly line runs until the barramundi have been raised to market weight, about 2 lb., after which they're sent off to white-tablecloth seafood restaurants and sustainability-minded retail outlets across the U.S.

From the moment the barramundi are hatched, from eggs barely one-hundredth of an inch long to the day they're sold, they never swim in a river or sea, never hunt for food, never feel the tug of a fishing line. "We're producing great-quality fish without harming the oceans or anything else," Goldman says of his operation, Australis Aquaculture. His barramundi aren't caught; they're manufactured. And factories like these might represent the last, best chance for fish to have a future.

Since human beings first took up the plow about 10,000 years ago, most of our food has come from the farmer's hand. We grew fruits, vegetables and grains to feed ourselves and support those domesticated animals we relied on for meat and dairy products. But there was an exception. When humans fished, we still went out into the wild, braved the elements and brought back decidedly undomesticated animals for dinner. There was a romance to fishing that was inseparable from the romance of the sea, a way of life—for all its peril and terror—suffused with a freedom that the farmer and rancher would never know. Though the fishermen who roved the Sea of Galilee in Jesus' time

and the factory trawlers that scrape the ocean floor today couldn't be more different, they share a common link to our hunter-gatherer past. "Fish are the last wild food," says Paul Greenberg, author of Four Fish, one of the best books on the state of seafood. "And we're just realizing it."

But we may be coming to that realization too late, because it turns out that even the fathomless depths of the oceans have limits. The U.N. reports that 32% of global fish stocks are overexploited or depleted and as much as 90% of large species like tuna and marlin have been fished out in the past half-century. Once-plentiful species like Atlantic cod have been fished to near oblivion, and delicacies like bluefin tuna are on an arc toward extinction. A recent report by the International Programme on the State of the Ocean found that the world's marine species faced threats "unprecedented in human history"—and overfishing is part of the problem.

Meanwhile, the worldwide catch seems to have plateaued at about 90 million tons a year since the mid-1990s. That's a lot of fish, but even if those levels prove sustainable, it's not enough to keep up with global seafood consumption, which has risen from 22 lb. per person per year in the 1960s to nearly 38 lb. today. With hundreds of millions of people joining the middle class in the developing world and fish increasingly seen as a tasty and heart-healthy form of protein, that trend will continue. The inescapable conclusion: there just isn't enough seafood in the seas. "The wild stocks are not going to keep up," says Stephen Hall, director general of the World Fish Center. "Something else has to fill that gap."

Something else already does: aquaculture. Humans have been raising some fish in farms for almost as long as we've been fishing, beginning with Chinese fishponds 4,000 years ago. But it's only in the past 50 years that aquaculture has become a true industry. Global aquacultural production increased from less than 1 million tons in 1950 to 52.5 million tons in 2008, and over the past few decades, aquaculture has grown faster than any other form of food production. Today about half the seafood consumed around the world comes from farms, and with the projected rise in global seafood consumption, that proportion will surely increase. Without aquaculture, the pressure to overfish the oceans would be even greater. "It's no longer a question about whether aquaculture is something we should or shouldn't embrace," says Ned Daly, senior projects adviser at the Seafood Choices Alliance. "It's here. The question is how we'll do it."

That's not an easy question to answer, because the rapid growth of aquaculture has been accompanied by environmental costs. In the past, the dense salmon farms of Canada and northern Europe helped spread disease among wild fish

while releasing waste into coastal waters. Mangrove forests, which provide a valuable habitat for coastal life, have been razed to make way for Thailand's shrimp farms. Especially troubling, many of the most popular farmed species are carnivores, meaning they need to be fed at least partly with other fish. By one count, about 2 lb. of wild fish ground up to make fish meal is needed on average to produce 1 lb. of farmed fish, which leaves the ocean at a net loss. "Aquaculture's reliance on fish meal and fish oil is a major concern for marine conservation," says Sebastian Troeng, a marine expert with Conservation International.

But aquaculture will keep growing. As it does, it will need to become more efficient and less polluting. The good news is that the industry is improving. More farmable but less familiar species like the barramundi-which yields more protein than it takes in as feed-may have to supplement popular fish like cod that haven't taken as well to aquaculture. We may even need to genetically engineer popular species to make them grow faster and bigger. And perhaps most of all, we need to accept that on a planet with a population of nearly 7 billion and climbing, we may no longer be able to indulge our taste for the last wild food. We've farmed the land. Now we have little choice but to farm the sea as well.

(Adapted from *Time*, July 7, 2011, written by Bryan Walsh)

Notes

- **Turners Falls** 特纳斯福尔斯，在美国马萨诸塞州。
- **Sea of Galilee** 加利利海，亦称太巴列湖，是以色列最大的淡水湖。
- **World Fish Center** 世界渔业研究中心，是非营利国际组织世界农业研究磋商组织下设的研究中心，于 1977 年在洛克菲勒基金赞助下成立。其总部设在马来西亚，并在非洲、亚洲以及太平洋地区等 8 个国家建立分局与研究站，致力于帮助发展中国家人民通过发展渔业减少饥饿和贫困人口。
- **mangrove forests** 红树林，一种热带、亚热带海湾、河口泥滩上特有的常绿灌木和小乔木群落。
- **Conservation International** 保护国际，非营利国际环保组织，总部设在美国弗吉尼亚州的阿灵顿。该组织的目标是通过保护自然、生物多样性来造福人类。

New Words

hangar ['hæŋə]
n. a very large building where aircraft are kept 飞机库，飞机棚

barramundi [ˌbærə'mʌndɪ]
n. a species of large perch noted for its sporting and eating qualities 澳洲肺鱼

omnivorous [ɒm'nɪvərəs]
adj. feeding on both plants and animals（尤指动物）杂食性的，肉草兼食的

kiddie ['kɪdɪ]
n. kid 小孩

fatten ['fætən]
vt. to feed animals to make them grow fatter 喂肥，养肥（牲畜）

pellet ['pelɪt]
n. a small ball of a substance 小球，颗粒

cavernous ['kævənəs]
adj. a cavernous room, space, or hole is very large and deep 大而深的

tug [tʌg]
n. a sudden abrupt pull 猛拉，推力

aquaculture ['ækwəkʌltʃə]
n. rearing aquatic animals or cultivating aquatic plants for food 水产养殖，水产业

suffuse [sə'fju:z]
vt. to cause to spread or flush or flood through, over, or across（指颜色、水汽等）弥漫于，布满

rancher ['rɑ:ntʃə]
n. someone who owns or works on a ranch 大牧场主，牧场工人

rove [rəʊv]
vt. to travel from one place to another 漂泊，徘徊

scrape [skreɪp]
vt. to remove something from a surface by using the edge of a knife, stick etc. 擦，刮，刮破，挖空

hunter-gatherer ['hʌntə'gæðərə]
n. a member of a hunting and gathering society（多指原始社会）依靠狩猎和采集生活的人

fathomless ['fæðəmləs]
adj. too deep to be measured, too complicated to be understood 深不可测的，不可了解的

marlin ['mɑ:lɪn]
n. large long-jawed oceanic sport fishes; related to sailfishes and spearfishes 枪鱼，青枪鱼，四鳃旗鱼

cod [kɒd]
n. a large sea fish that lives in the North Atlantic 鳕鱼

oblivion [ə'blɪvɪən]
n. the state of being completely forgotten 遗忘，淹没

bluefin ['blu:fin]
n. another name for tuna 金枪鱼

arc [ɑ:k]
n. a curved shape 弧（度）

plateau ['plætəʊ]
v. a period during which the level of cost, achievement etc. doesn't change, especially after a period when it was increasing 进入停滞期，达到平稳状态

projected [prə'dʒektid]
adj. being calculated or designed 规划的，设计的，预期的，估计的

raze [reɪz]
vt. to completely destroy a town or building 彻底摧毁，夷为平地

Exercises

Questions 28—32

Do the following statements agree with the information given in the passage? In brackets ***28—32****, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

28. (　　) In Josh Goldman's fish farm, the way fishes are raised is somewhat like products are manufactured in assembly line in factory.

29. (　　) The romance to fishing is closely related to the romance of the sea.

30. (　　) According to the U.N. reports, about one third of the global fish stocks is over exploited or depleted.

31. (　　) More and more people consider fish a tasty and heart-healthy form of protein.

32. (　　) Aquaculture became a true industry 100 years ago.

Questions 33—38

Look at the following information and the list of figures below. Match each figure with its related information.
*Write the corret letter, **A–F**, in blanks **33–38**.*

List of Figures

A 52.5 million tons	**B** nearly 7 billion
C 10000 years ago	**D** 38 lb.
E 4000 years ago	**F** 90 million tons

33. the world population
34. the time when human beings began to be engaged in agriculture
35. the yearly worldwide fish-catch
36. the global aquaculture production in 2008
37. the per capital consumption of seafood in recent years
38. the time when Chinese began to raise fish in farms

33. ________ 34. ________ 35. ________ 36. ________ 37. ________ 38. ________

Questions 39—41

Translate the sentences from the passage into Chinese.

39. We grew fruits, vegetables and grains to feed ourselves and support those domesticated animals we relied on for meat and dairy products.

____

____

40. But we may be coming to that realization too late, because it turns out that even the fathomless depths of the oceans have limits.

____

____

41. That's not an easy question to answer, because the rapid growth of aquaculture has been accompanied by environmental costs.

____

____

Unit 12

Section A

Reading Passage 1

Business School: Bad for Business?

Business schools stand accused of being responsible for much that is wrong with corporate management today.

A This is the time of year when MBA students run not from classroom to classroom but from interview to interview as they try to get the high-paying job that they expect their qualification to deliver. It seems that the demand for MBAs is now strong again, after four decidedly weak years. "The big eaters of MBA talent have regained their hiring appetite," says Ken Keeley, director of career opportunities at Carnegie Mellon's Tepper School of Business in Pittsburgh. At New York's Stern School, close to Wall Street, the number of jobs offered to this year's MBA class by the beginning of this month was double that at the same stage in 2004. Better still, average starting salaries in investment banking for Stern graduates were—at $95,000—up by $10,000 from a year ago.

B But just as the market value of an MBA is reviving, its academic credibility is being attacked. In a forthcoming article to be published posthumously in *Academy of Management Learning & Education*, Sumantra Ghoshal argues that many of the "worst excesses of recent management practices have their roots in a set of ideas that have emerged from business-school academic over the last 30 years". Mr. Ghoshal was just such an academic, a professor at London Business School until he died 11 months ago at the age of 55. He believed that the desire of business schools to make the study of business a science, "a kind of physics", has led them increasingly to base their management theories on some of the more dismal assumptions and techniques developed by economists, particularly by the "Chicago School" and its intellectual leader, Milton Friedman. These include supposedly simplistic models of individual human behaviour (rational, self-interested,

utility-maximising *homo economicus*) and of corporate behaviour (the notion that the goal of a firm should be to maximise shareholder value). These assumptions, though in Mr. Ghoshal's view badly flawed, were simple enough to allow business-school academics to develop grand theories of management supported by elegant mathematical models and empirical analysis that appeared scientific, and thus earned their subject academic respectability, but were, in fact, a pretence of knowledge where there was none.

Fight Fiercely, Harvard

C Mr. Ghoshal's article is particularly critical of the management theories associated with two prominent Harvard Business School professors: Michael Jensen, whose development of agency theory has encouraged business schools to teach "our students that managers cannot be trusted to do their jobs"; and Michael Porter, whose "five forces framework" has been presented to "suggest that companies must compete not only with their competitors but also with their suppliers, customers, employees and regulators".

D A particularly worrying feature of these theories, says Mr. Ghoshal, is that they have no "role for human intentionality or choice". And not only do such theories falsely claim to be scientific, teaching them can make them self-fulfilling. Business-school students learn that managers cannot be trusted—so when they become managers their behaviour is of the untrustworthy sort. Students have been freed "from any sense of moral responsibility". Hence scandals such as those at Enron, where business-school educated executives were prominent. And hence, perhaps, future Enrons yet to be created by this year's much-in-demand crop of MBAS.

E Mr. Ghoshal is not the only heavyweight academic to have come out with such a *mea culpa*. *Jeffrey pfeffer* of Stanford University's Graduate School of Business, writes in the same journal that Mr. Ghoshal "if anything understates the potential downside to the inculcation and acceptance of economic language, assumptions and theory". In support he refers to a study in 2000 which found that a link between corporate size and the number of citations for violating health and safety regulations became stronger as the percentage of a firm's top managers holding an MBA rose. In a book published last year, "Managers not MBAS", Henry Mintzberg, a Canadian business professor and a long-time critic of the degree, wrote that "the MBA trains the wrong people in the wrong ways with the wrong consequences".

F Not surprisingly, many business schools reject these claims. While Enron was

well stuffed with MBAS and led by Jeffrey Skilling, a man who liked it to be known that he was near the top of his Harvard Business School MBA class, the clutch of top executives currently on trail for corporate corruption are notable for their lack of business-school qualifications. Richard Scrushy started his life as a humble hospital worker. He was charged of fraud involving billions of dollars when he was boss of HealthSouth, a health provider, but "he didn't have a CPA accounting degree or an MBA in business administration".

G It is also hard to square Mr. Ghoshal's claim that recent scandals were the result of managers too eagerly trying to maximise shareholder value with the fact that shareholders have been some of the main victims of their actions. Nor for that matter is it true that everything taught in business schools is presented as scientific: Harvard's method of discussing corporate case studies, for example, is anything but scientific. And while there is some validity to criticisms of using simplistic economic assumptions—even the University of Chicago is losing its faith in homo economicus—it is easy to see why recent high-profile corporate-governance failures have mostly been viewed as evidence for, not against, agency theory.

(Adapted from *The Economist*, February 19, 2005, anonymous)

Notes

- **Carnegie Mellon's Tepper School of Business** 卡耐基梅隆大学泰珀商学院，世界著名的商学院，建于 1949 年，位于宾夕法尼亚州的匹兹堡。
- **New York's Stern School of Business** 纽约大学史登商学院，成立于 1900 年，是世界最古老和最著名的商学院之一。
- **Harvard Business School** (HBS) 哈佛大学商学院，建于 1908 年。
- **London Business School** 伦敦商学院，是伦敦大学下属的一所研究生院，成立于 1964 年，是目前全球著名的商学院之一。

New Words

forthcoming [ˌfɔːθ'kʌmɪŋ]
adj. happening or coming soon 即将到来

posthumously ['pɒstjʊməslɪ]
adj. published after a writer's death 著作者死后出版的

shareholder ['ʃeəhəʊldə]
n. a stockholder 股东

flaw [flɔː]
adj. spoiled by having mistakes, weakness, or by being damaged 有瑕疵的，有缺点的

empirical [ɪm'pɪrɪkl]
adj. based on real experience or scientific experiments rather than on theory 经验的，经验主义的

intentionality [ɪnˌtenʃə'nælɪtɪ]
n. expressive of intentions 意向性，意图性

untrustworthy [ʌn'trʌstwɜːðɪ]
adj. not worthy of trust or belief 不能信任的，靠不住的

heavyweight ['hevɪweɪt]
n. a person of exceptional importance and reputation 有影响的人，要人

downside ['daʊnsaɪd]
n. a negative aspect of something that is generally positive 负面，消极面

inculcation [ˌɪnkʌl'keɪʃən]
n. the state of fixing ideas, principles etc in someone's mind 谆谆教诲，反复灌输

citation [saɪ'teɪʃən]
n. a phrase or sentence taken from a piece of writing or speech 引证，引用

high-profile [ˌhaɪ'prəʊfaɪl]
adj. attracting a lot of public attention, usually deliberately 高姿态的，高调的

Phrases and Expressions

stand accused of	受谴责，遭责难
better still	更好，更妙
associate with	联系，联合
much-in-demand	需求量很大
be stuffed with	塞满
on trial	受审
anything but	绝不是

Text Analysis

The passage of argumentation raises a discussion over "worst excesses of recent management practices" and the top managers' (with MBA background) "academic credibility".

The passage roughly falls into three parts: the revival of MBAs market value; the criticism

of business school by Sumantra Ghoshal; and the author's response to the criticisms of business schools.

Part one, the very first paragraph, informs readers of the trend that popularity of MBA students comes back in the job market. The employment statistics from some business schools support the strong demands for graduates from them.

Part two consists of four paragraphs—B to E. Against the increasing demand, education in MBA is under attack, especially by a deceased academic, a professor, Sumantra Ghoshal. His criticisms went particularly to Milton Friedman who attempted to make business a science. The management theories seemed to be scientific, which, actually, was "a pretence of knowledge", as comments the author. Ghoshal, in Paragraph C, furthered his criticisms against Michael Jensen's agency theory and Michael Porter's "five forces framework". Paragraph D continues to disclose the worrying feature of the above theories as Mr. Ghoshal viewed, In Paragraph E, Some academics such as Jeffrey pfeffer and Henry Mintzberg echoed Mr. Ghoshal's judgments with evidence from study and review.

Part three is made up of two paragraphs, Paragraphs F and G, where the writer presents his opinions over the topic. Some evidence was employed to challenge Mr. Ghoshal's criticisms including some corporate corruption without business-school qualifications, shareholders as main victims of their actions and Harvard's unscientific method of discussion. Still, the author suggests that Mr. Ghoshal's perspectives over simplistic economic assumptions are partially valid, what's more, his comments over agency theory has been exemplified by failures in high-profile corporate-governance.

Word Roots

viv 词根源于拉丁文 vivere（= to live 生活，生存），过去分词 victus

同根词：

revive	*v.*	振奋，复活
revivify	*v.*	使复活，使振作，使还原
survive	*v.*	继续存在，生存下去
survivor	*n.*	残存者，生存者
vivid	*adj.*	鲜明的，生动的，活泼的

根据词根词缀猜下列词的词义：

1. vivacious *adj.* ____________
2. vivisection *n.* ____________
3. convivial *adj.* ____________

4. reviviscence	*n.*	________
5. vivarium	*n.*	________
6. revitalize	*v.*	________

lect，leg 词根源于拉丁文 legere（= to choose 选择，to gather 集合，to read 读）

同根词：

collect	*v.*	收集，集合，堆积
elect	*v.*	推举，选举
electorate	*n.*	选民，选举团，选区
intellect	*n.*	智力，理解力
intellectual	*n.*	知识分子
	adj.	智力的，理智的，用脑的

根据词根词缀猜下列词的词义：

7. neglect	*v.*	________
8. recollection	*n.*	________
9. legendary	*adj.*	________
10. elegant	*adj.*	________
11. lecturer	*n.*	________
12. diligent	*adj.*	________

cite 词根源于拉丁文 citare（=to cause to move 驱策，to summon 呼叫）

同根词：

citation	*n.*	传讯，传票，引证，引用
excitant	*adj.*	兴奋的
	n.	兴奋剂
recital	*n.*	述说，吟诵，独奏会

根据词根词缀猜下列词的词义：

13. incite	*v.*	________
14. resuscitate	*v.*	________
15. resuscitator	*n.*	________
16. solicit	*v.*	________
17. solicitor	*n.*	________
18. solicitude	*n.*	________



Synonyms

send, deliver, dispatch, forward, ship, transmit
这些动词均含"送出，发送，传送"之意。

send：普通最常用词，含义较广，指把人或物由一地送往另一地，而不涉及事物的内容或送的方式。

deliver：指把信件、包裹等物寄发出去或交到某地，或直接交与某人，着重发送这一行为。可引申为演讲之意。

dispatch：指为特殊目的而发送或派遣，强调紧急或快速。

forward：指经过其他人或手段把东西转送给某人。

ship：把通过水运、陆运或空运等方式运送东西。现常指商业上的运货，或将物品托运。

transmit：指将文件、信号、消息等的内容发至某地或传达给他人。

Complete the following sentences with the proper form of the words listed above.

19. Your order was ___________ on May 10th by first class mail.

20. Your inquiry has been ___________ to our head office.

21. The Cup Final was ___________ via satellite to over 50 countries.

22. Chinese doctors were ___________ in to help local hospitals.

23. American troops have been ___________ to keep the area in peace.

24. The main speech was ___________ by the President.

condition, state, status, situation, circumstance
这些名词均有"状况，情况"之意。

condition：多指某物自身的具体情况或环境。

state：普通用词，指人或物在环境、外表、心灵以及健康方面的状况，或指在某一阶段的状态或形式。

status：指一个人在政治、社会、经济、法律上的地位或身份，暗含地位显要，也可用于指政治等事态的状况，事情的重要性等。

situation：指具体的环境情况或处境。

circumstance：多指周围的情况或某事发生时的情况。

Complete the following sentences with the proper form of the words listed above.

25. Our organization seeks to improve the social ___________ of the disabled people.

26. The office hold a survey to assess the ___________ of thousands of bridges.

27. The ___________ surrounding the child's death are being investigated.

28. The British transportation system is in a bit of a sorry ___________ .

29. We'll have to deal with overcrowding as the ___________ arises.

30. Officials are now discussing the current ___________ of the conflicts in the country.

Exercises

Questions 1—5

*Complete the summary of paragraphs C and D below. Choose **NO MORE THAN THREE WORDS** from the passage for each answer.*

Against the increasing demand, education in MBA is under attack, especially by a 1___________ academic, Professor Ghoshal. His 2___________ went particularly to Milton Friedman who attempted to make the study of 3___________ a science. What's more, he criticized Michael Jensen's 4___________ theory and Michael Porter's "five forces framework". He worried that these theories failed in role-playing for human 5___________.

Questions 6—11

*Do the following statements agree with the information given in the passage? In brackets **6—11**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

6. (　　) The demand for MBAs is increasing now, and academic circles also regain public trust.

7. (　　) Milton Friedman supposes that the executives should aim at maximizing shareholder value.

8. (　　) Henry Mintzberg doesn't believe the MBA can serve society in a correct way.

9. (　　) The main reason why Enron failed because it was stuffed with MBAs.

10. (　　) Jeffrey pfeffer pointed out that the more the top managers are, the more the firm is likely to violate the regulations.

11. (　　) Not everything taught in business schools is presented as scientific, such as discussing corporate case studies.

Questions 12—14

Translate the sentences from the passage into Chinese.

12. Sumantra Ghoshal argues that many of the "worst excesses of recent management practices have their roots in a set of ideas that have emerged from business-school academic over the last 30 years".

____

____

13. A particularly worrying feature of these theories, says Mr. Ghoshal, is that they have no "role for human intentionality or choice".

____

____

14. It is also hard to square Mr. Ghoshal's claim that recent scandals were the result of managers too eagerly trying to maximize shareholder value with the fact that shareholders have been some of the main victims of their actions.

____

____

Section B

Reading Passage 2

Life Is a Shell Game

A One early morning in June of 1986, I waded into a shallow tide pool on Long Island, squatted on a plastic milk crate and dropped an empty snail shell into the water. In a few minutes a small hermit crab skittered toward the shell, probed the opening with its claws to measure the size of the casing several times to look for holes. Almost quicker than I could follow, the crab pulled itself out of its old refuge and thrust its vulnerable abdomen into the snail shell I had dropped. Satisfied with the exchange, the animal strolled away, leaving its previous, smaller shell behind. A few minutes later another hermit crab discovered the first one's discarded dwelling and, after

the same inspection ritual, scuttled away with its newfound lodging. About 10 minutes later a third crab found the second's old home and claimed its prize, abandoning a small shell with a large hole.

B It may seem strange, but this was one of the happiest moments in my life as a researcher. For nearly 10 years I had been wondering whether hermit crabs take up residence in one another's vacated shells. I finally had my confirmation. I was the first person to observe an animal making use of what sociologists and economists call a "vacancy chain"—an organized method of exchanging resources in which every individual benefits by claiming a more desirable possession abandoned by another individual. Even though hermit crabs have relatively simple brains and nervous systems, they have evolved sophisticated social behaviors to make the most of vacancy chains.

C In all likelihood, researchers will soon discover the same thing about other animals; already preliminary evidence hints that in addition to hermit crabs, limpets, lobsters, fishes, octopuses and woodpeckers also take turns upgrading their homes. Studying these animals may help us recognize and improve vacancy chains in our own communities, providing new insights for problems such as Manhattan apartment shortages and drug crime. The fact that hermit crabs and other critters depend on vacancy chains is also changing the way sociologists think about economic strategies. Some tactics, it seems, do not require human-level intelligence or altruism—they are far more universal.

Crabs in Queue

D From June to September 1986, as well as the next summer, I brought groups of students to West Meadow Beach on Long Island to observe vacancy chains in Pagurus longicarpus—a hermit crab common to the East Coast. I wanted to discover basic facts about the chains, such as how many crabs acquired new shells in the average sequence and whether the availability of bigger shells created longer chains. After a morning's observations, we drove to my laboratory and immersed the crustaceans in warm water so that they would relax and we could remove them from their shells without hurting them. We weighed and measured the crabs and their shells to determine their sizes at various positions in the chains. When we had what we needed, we put each crab into a tank filled with cool water and a large selection of empty shells. When the animals had chosen a shell, we returned them to the beach and set them free.

E We found that the crabs usually traded up to bigger shells and that the

chains we initiated with large shells were indeed longer—allowing more crabs to get new shells—than the chains we started with small shells. Between two and three crustaceans upgraded to a new home in the chains we started—2.5 on average. Some people are disappointed to hear this number. They expect it to be larger—something on the order of 10 or even 50 crabs benefiting in each chain. I tell them that this number is large if you look at it in the right way. Usually when we think about competition, we presume that one individual or group is successful and that the other competitors are not. But in a vacancy chain, even a short one, more than one individual obtains a new possession. If only two hermit crabs acquired new shells, that figure would still be twice the number of individuals obtaining a resource compared with more typical competition.

F After our studies, other researchers reported vacancy chains in various species of hermit crabs, including Caribbean land hermit crabs, which are sometimes sold as pets. One of the strangest examples involves a predatory snail that attacks other kinds of snails, including some whose shells hermit crabs particularly like. As the predatory snail grasps the prey snail, drills a hole in its shell with a rasp like tongue and injects digestive enzymes, nearby hermit crabs gather around, following the scent of chemicals released by the injured snail. When the predatory snail finally pulls its prey from its protective casing—a process that can take as long as an hour—the nearest crab dives into the new empty shell. In turn, another crab immediately snatches the first crab's old shell, and so on. Instead of following the careful inspection rituals that we observed on Long Island, crabs at the scene of a mollusk murder make split-second decisions—choosing new homes based on vision alone. Everyone in the vacancy chain benefits, but the immediacy of the competition speeds everything up.

G Recently researchers have made further surprising discoveries about vacancy chains in hermit crabs. It turns out that crabs use at least two kinds of chains: synchronous and asynchronous. In the asynchronous type (the kind we observed), usually one crab at a time comes across a vacant shell. But in synchronous chains, the animals queue up by size in descending order behind a crab examining a vacant shell. When the first crab in line settles on a new shell, the crab behind him takes his shell, and so on, within seconds. Such well-orchestrated behaviors suggest sophisticated social cognition, especially for an animal with a relatively small and simple brain.

H Few published studies focus on vacancy chains in animals besides hermit crabs, but preliminary observations suggest that the strategy has evolved

in many different species. Like hermit crabs, several species of octopuses and cichlid fish live in and defend empty snail shells. Limpets hunker down in the recesses of rocks, and clown fish snuggle up to sea anemones. Maine and southern spiny lobsters occupy small caves in rock or coral. And the red-cockaded woodpecker carves nest hollows out of the trunks of pine trees. As many of these creatures grow larger and older, they seek better-suited shelters, creating vacancies for other animals. People do exactly the same thing.

(Adapted from *Scientific American*, June 2012, written by Ivan Chase)

Notes

- **Long Island** 长岛，位于北美洲大西洋的岛屿，行政上属于美国纽约州的一部分。
- **vacancy chain** 空置链，是一种有组织的资源交换方式，所有个体都能从其他个体丢弃的物品得到自己想要的。

New Words

wade [weɪd]
vt. to walk (through relatively shallow water) 涉水，淌过

skitter ['skɪtə]
vt. to glide easily along a surface 轻轻掠过

casing ['keɪsɪŋ]
n. the outermost covering of a tire, etc. 外胎，罩壳

stroll [strəʊl]
vi. to walk leisurely and with no apparent aim 溜达，散步

dwelling ['dwelɪŋ]
n. housing that someone is living in 寓所，住处

lodging ['lɒdʒɪŋ]
n. structures collectively in which people are housed 住处，寄宿处，宅邸

vacate [və'keɪt]
vt. to leave behind empty; move out of 使空虚，腾出，退出

limpet ['lɪmpɪt]
n. mollusk with a low conical shell 冒贝

lobster ['lɒbstə]
n. any of several edible marine crustaceans of the families Homaridae and ephropsidae and Palinuridae 龙虾，大虾

octopus ['ɒktəpəs]
n. bottom-living cephalopod having a soft oval body with eight long tentacles 章鱼

woodpecker ['wʊdpekə]
n. bird with strong claws and a stiff tail adapted for climbing and a hard chisel-like bill for boring into wood for insects 啄木鸟

altruism ['æltruɪzəm]
n. the quality of unselfish concern for the welfare of others 利他主义

immerse [ɪ'mɜːs]
vt. to thrust or throw into 沉浸，浸入

crustacean [krʌ'steɪʃən]
n. any mainly aquatic arthropod usually having a segmented body and chitinous exoskeleton 甲壳动物

predatory ['predətrɪ]
adj. living by preying on other animals especially by catching living prey 食肉的，掠夺成性的

mollusk ['mɒləsk]
n. invertebrate having a soft unsegmented body usually enclosed in a shell 软体动物

synchronous ['sɪŋkrənəs]
adj. occurring or existing at the same time or having the same period or phase 同时的，同期的

asynchronous [eɪ'sɪŋkrənəs]
adj. not synchronous; not occurring or existing at the same time or having the same period or phase 异步的，不同时的

orchestrate ['ɔːkɪstreɪt]
vt. to plan and direct (a complex undertaking) 精心策划，组织

cichlid ['sɪklɪdɪ]
n. freshwater fishes of tropical America and Africa and Asia similar to American sunfishes; some are food fishes, many small ones are popular in aquariums 丽鱼科，观赏鱼

Phrases and Expressions

in all likelihood	十之八九，多半
take turn	轮流
split second	瞬间的
queue up	排队

hunker down 蹲下来

in the recesses of 在深处

snuggle up to 依偎，紧靠

Exercises

Questions 15—20

Complete the summary below. Choose ***ONE WORD ONLY*** *from the Paragraphs D, E, and F for each answer.*

To confirm the idea whether shells 15____________ is in proportion to the length of 16____________, the writer and his group spent at least 17____________ months observing vacancy chains. The result was positive. After their studies, more findings proved that immediate decision-makings, for crabs, mainly depended on 18____________. The more severe the 19____________ is, the faster the 20____________ is.

Questions 21—24

Answer the questions below. Choose ***ONE WORD ONLY*** *from the passage for each answer.*

21. When choosing a dwelling, what do hermit crabs give first priority to a shell?

____

22. What accelerates new dwelling's choosing in the vacancy chains?

____

23. In which chains do hermit crabs line up?

____

24. How many crabs change their homes at a time in asynchronous chains?

____

Questions 25—27

Translate the sentences from the passage into Chinese.

25. I was the first person to observe an animal making use of what sociologists and economists call a "vacancy chain"—an organized method of exchanging resources in which every individual benefits by claiming a more desirable possession abandoned by another individual.

____

26. If only two hermit crabs acquired new shells, that figure would still be twice the number of individuals obtaining a resource compared with more typical competition.

27. Everyone in the vacancy chain benefits, but the immediacy of the competition speeds everything up.

Reading Passage 3

The $10 Billion Man

A It is said that he could add $10 billion to the market value of Ford or General Motors with a stroke of his pen. But Carlos Ghosn is not about to sign up as chief executive of either firm. Instead, in May, he will become the boss of Renault, France's second-largest carmaker, while continuing to head Nissan, Japan's number two car firm. To ease the transition, this week he named Toshiyuki Shiga as Nissan's chief operating officer.

B Although Renault and Nissan have cross-shareholdings and a deep alliance, their relationship deliberately stops well short of outright merger. Perhaps that is why it has been so successful, avoiding the integration pain that has marred, for instance, Daimler-Benz takeover of Chrysler. In his book, *Shift: Inside Nissan's Historic Revival*, published in English last month, Mr. Ghosen says that the strength of the alliance "can be found, on the one hand, in its respect for the identities of the two companies, and on the other, in the necessity of developing synergies."

C Certainly the benefit has flowed both ways since the Franco-Japanese deal was done in 1999. First, Renault rescued Nissan, buying a stake (now 44%) and installing its Mr. Ghosn as chief operating officer (and later chief executive). Mr. Ghosn turned huge losses into a $7 billion profit and wiped out debts of about $23 billion. This has helped to prop up Renault's sagging profits in recent years. Nissan's latest operating profit margin is about 11%, making it the world's most profitable volume carmaker. Mr. Ghosn's reputation soared as he set, then, met, ambitious targets.

D Now he is to be the first executive to try to run two big carmakers at once. No one has ever revived a carmaker as spectacularly as he has much less attempted an encore. But then the industry has never seen anyone like the larger-than-life Mr. Ghosn. Born in Brazil to a Lebanese immigrant family, he went to a french school in Lebanon before studying engineering at the Ecole poly technique in Paris. Few Frenchmen speak four European languages and get by in Japanese as well. He first made his name by turning around Michelin's business in Brazil, then America, before being hired by Renault. He was soon nicknamed "le cost killer" as he revived Renault in the mid-1990s.

E In 1999, when Louis Schweitzer—Renault's now soon-to-depart chief executive—decided to link up with Nissan, he knew that Mr. Ghosn, already his intended successor at Renault, was the man to put in charge of rescuing the Japanese firm. Mr. Ghosn's "Nissan Revival Plan" involved shedding 20,000 jobs and closing five factories, a drastic move in conservative Japan. He also abandoned the cosy Keiretsu family-of-firms system, a pillar of Japanese industry. Nissan's shares in Keiretsu suppliers were sold to pay off debt. He slimmed down Nissan's product range, but accelerated development of new models.

F A second plan, "Nissan 180" launched in 2002, stands for reversing the company's decline by adding 1m in sales by October this year, achieving an operating margin of 8% and eliminating its debt. With sales in North America topping 1m, Nissan is on course to hit the last remaining target, before a new plan is unveiled in April. Then it will be up to Mr. Shiga to hit those targets, under his boss's watchful eye. If he lives up to expectations, Mr Shiga could be in line to succeed Mr. Ghosn as chief executive at Nissan within a few years.

G Mr. Ghosn attributes his success to the way that he works through cross-functional teams. He thinks that when people from different backgrounds work together under pressure they come up with more creative solutions. He proved the value of this technique when he successfully merged Michelin's American tyre business with another firm in the teeth of a recession. His personal style is brisk and direct, but not without warmth.

My Other Car Firm's a Renault

H And yet why risk everything by adding to his workload? Both Renault and Nissan have concluded that they have no choice but to share a boss for the next few years. To put a Japanese executive shoes immediately might have signaled a return to the old days of consensual dithering and seemed too

aggressive. Mr. Ghosn's diverse international background made him more acceptable in Japan. He was not seen as an invading Frenchman. Indeed Ghosn-san has become a sort of national hero in his adopted country.

I Mr. Ghosn will devote the first few months in his new role to "re-discovering Renault", mostly in Paris. Then, he says, he will spend 40% of his time in Paris, 35% in Tokyo, 15% in America and the other 10% in places such as China, Thailand, Brazil and Turkey. Needless to say, he has the use of a long-range executive jet. Over time, Mr. Ghosn expects the executive teams of both Renault and Nissan to become more international.

J America could prove his biggest challenge. First, he has to manage Nissan's headlong expansion there: the firm stumbled last year, with quality problems in vehicles made by inexperienced workers at a new factory in Canton, Mississippi. Mr. Ghosn reacted by taking direct charge of the American business, which he will continue to run hands-on for another year, in addition to his many wider responsibilities. He drafted in 200 engineers from Japan to sort out the Canton factory and improve quality. It was a reminder that not everyone can keep up with Mr Ghosn's rapid pace.

K Mr. Ghosn's predecessor at Renault always dreamed that the alliance with Nissan would help the French brand to re-enter the huge American market, where some foreign car brands make huge profits. But Mr. Ghosn seems more cautious. He thinks America poses huge risks. Renault has failed twice there before. But if he can make the transformational European-Japanese alliance a two-pronged success in America, Mr. Ghosn will truly deserve to be called the $10 billion man.

(Adapted from *The Economist*, February 26, 2005, anonymous)

Notes

- **Carlos Ghosn** (1954—) 卡洛斯·戈恩，法国人，出生于巴西，黎巴嫩后裔，现任法国雷诺汽车公司 CEO、日本日产汽车公司 CEO，旗下生产的汽车超过世界市场的十分之一。
- **Renault S.A.** 雷诺汽车公司，创建于 1898 年，是法国第二大汽车公司，也是世界十大汽车公司之一。

New Words

outright ['aʊtraɪt]
adj. without reservation or exception 明白的，十足的，彻底的

merger ['mɜ:dʒə]
n. the combination of two or more commercial companies 合并，结合

integration [ˌɪntɪ'greɪʃən]
n. the act of combining into an integral whole 统一，结合

mar [mɑ:]
vt. to destroy or injure severely 损毁，损害

revival [rɪ'vaɪvl]
n. bringing again into activity and prominence 苏醒，复活，再流行

synergy ['sɪnədʒɪ]
n. the working together of two things (muscles or drugs for example) to produce an effect greater than the sum of their individual effects 协同作用，协同效果

sag [sæg]
vt. to drop, sink, or settle from or as if from pressure or loss of tautness 松弛，下垂，(物价等)下跌

encore ['ɒŋkɔ:]
n. an extra or repeated performance; usually given in response to audience demand 要求重演，重唱

nickname ['nɪkneɪm]
n. a familiar name for a person (often a shortened version of a person's given name) 诨名，绰号

successor [sək'sesə]
n. person who inherits some title or office 继承人，接班人

brisk [brɪsk]
adj. imparting vitality and energy 活泼的，生机勃勃的

consensual [kən'senʃuəl]
adj. existing by consent 两厢情愿的，协商的，共识的

dithering ['dɪðərɪŋ]
n. an excited state of agitation 慌张，拿不定主意

headlong ['hedlɒŋ]
adj. very quickly, without looking where you are going 轻率的，鲁莽的

stumble ['stʌmbl]
vi. to miss a step and fall or nearly fall 绊倒，摔倒

predecessor ['pri:dɪsesə]
n. one who precedes you in time (as in holding a position or office) 前任，前辈

prong [prɒŋ]
n. a pointed projection 尖头

Phrases and Expressions

a stroke of	一击，一敲，一笔
sign up	签约
wipe out	消灭，扫除，毁灭
prop up	支撑，扶持，竖起
link up with	同盟，结亲
slim down	使消瘦，裁员
live up to	无愧于，配得上，达到标准
come up with	提出，想出，赶上
in the teeth of	不管，不顾
needless to say	毫无疑问，更不用说
sort out	整理，清理，挑选出

Exercises

Questions 28—32

Complete the summary below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*

Carlos Ghosn, a would-be boss of 28____________, handed chief 29____________over to his successor this week. Carlos is the larger-than-life man that he first made his 30____________ by the revival of Michelin's business. Then being an intended successor at Renault, he was appointed to 31____________ Nissan. He made a great success by the development of Nissan 180 in 2002. He claims that he couldn't succeed without 32____________teams.

Questions 33—37

The passage has eleven paragraphs ***A–K***. *Which paragraph contains the following information?*
Write the correct letter ***A–K***, *in blanks* ***33–37***.

33. Ghosn needs to travel a lot.

34. Ghosn defined the union between his Renault and Nissan.

35. Ghosn's language advantage enables him to be suitable for the international boss.

36. American market is risky but attractive

37. Ghosn's fame grew hugely

33. __________ 34. __________ 35. __________ 36. __________ 37. __________

Questions 38—40

Translate the sentences from the passage into Chinese.

38. It is said that he could add $10 billion to the market value of Ford or General Motors with a stroke of his pen.

____

____

39. In 1999, when Louis Schweitzer—Renault's now soon-to-depart chief executive—decided to link up with Nissan, he knew that Mr. Ghosn, already his intended successor at Renault, was the man to put in charge of rescuing the Japanese firm.

____

____

40. Mr. Ghosn's predecessor at Renault always dreamed that the alliance with Nissan would help the French brand to re-enter the huge American market, where some foreign car brands make huge profits.

____

____

Unit 13

Section A

Reading Passage 1

Search for the Compass Needles

A Most humans are hopeless navigators unless they have a map or the Global Positioning System to hand. By contrast, it is well known that many animals, including birds, use information from Earth's magnetic field to orient themselves, even over thousands of kilometers. But how do they sense the field? Iron-mineral-based structures within nerve cells in birds' upper beaks were previously proposed to act as one of two main magnetic sensors in birds, the other being a light-based system in the retina. However, Treiber *et al.* report that these iron-mineral deposits are in fact located inside macrophages, a kind of immune cell that is also involved in iron homeostasis.

B When people are asked how they think birds can sense magnetic fields, most suggest that birds must have small 'compass needles' somewhere in their body. The iron-containing minerals magnetite (Fe_3O_4) and maghemite (Fe_2O_3), which are found in various parts of a bird's body, are particularly well suited to sensing magnetic fields. However, these minerals can be relevant to magnetic sensing only if they are associated with nerve tissue and found in the same location in all individuals of a given species. In a landmark paper in 2003, Fleissner *et al.* reported that structures containing magnetite 'spherules' and maghemite 'platelets' are consistently present at six specific locations along the upper beaks of pigeons. These researchers suggested that the structures are magnetic sensors located in dendrites—nerve-cell endings. The structures included a large substructure that the researchers described as a vesicle.

C If these structures sense the magnetic field, this information must be transmitted to the brain via the ophthalmic branch of the trigeminal nerve, as this is the only nerve that enters a bird's upper beak. Indeed, when this nerve is cut, pigeons trained to detect a strong magnetic field can no longer perform this task. Furthermore, in European robins, which are migratory birds,

neurons in the brain regions that receive direct input from the trigeminal nerve are activated by a changing magnetic field stimulus, and this activation disappears if the trigeminal nerve is cut or if the magnetic field is removed. Therefore, even though there was no direct proof for their function, the iron mineral structures described by Fleissner and colleagues have been generally assumed to be the primary magnetic receptors associated with the trigeminal magnetic sense in birds.

D Treiber *et al.* challenge the interpretations of Fleissner and colleagues. On the basis of data that they collected from almost 200 pigeons, Treiber *et al.* propose that the iron-mineral-containing structures reported by Fleissner *et al.* are macrophages, not magnetic receptor cells. They show that the structures are located in variable quantities at inconsistent locations along the upper beak, and also elsewhere in the pigeon's body, such as in the respiratory tract and skin, and that they are not associated with nerve tissue. They also suggest that the spherules, which are strongly stained by the iron-marking dye Prussian blue, are in fact organelles called siderosomes, which contain the iron-storing protein ferritin, and that the large, round substructure is a nucleus, not a vesicle.

E Whose interpretation is correct? The answer to this question will be extremely important for magnetic-sense research. To form my own opinion, I examined many of the original microscope slides that make up the basis of Treiber and colleagues' report, and compared them with my previous observations of some of the original slides that contributed to Fleissner and colleagues' studies. In my view, a significant proportion of the iron-mineral containing structures found by Treiber *et al.* seem to be identical to those previously reported, even though some of the structures classified as such by Treiber *et al.* would, I believe, be regarded as artifacts by Fleissner and colleagues. However, even when I consider only those structures that look identical, these certainly seem to occur at many more than six specific locations along the beak. Indeed, Treiber and colleagues' laborious quantification shows that the occurrence of the iron-mineral-containing structures is highly variable between individual birds. By contrast, Fleissner and colleagues' claim of six specific locations is not supported by quantitative data. This lack of consistent distribution makes it highly unlikely that the iron-rich cells are part of a magnetic sensory system.

F The most defining difference between macrophages and dendrites is that macrophages have a nucleus and dendrites do not. Treiber and colleagues' data and original slides convincingly show that the iron containing structures

are nucleated and that there is no regular co-localization between Prussian-blue staining and nerve fibers. The structures, therefore, cannot be located in dendrites. Furthermore, the authors report 95–99% co-localization of staining with Prussian blue and a macrophage marker, strongly indicating that most, but maybe not all, of the described structures are macrophages.

G In conclusion, I find that serious doubt has been raised about the original proposals and that the burden of proof now lies with Fleissner and colleagues, if they still think that their structures are potential magnetic sensors. However, it is important to stress that Treiber and colleagues' results cannot exclude the possibility that there are iron-mineral-based sensors somewhere in the upper-beak region of pigeons. Only relatively few sensors may be needed. In fact, a magnetite-based sensory cell might contain only a few magnetite crystals and thus evade detection by Prussian-blue staining, the method used by both groups.

H The implications of this new report are dramatic. The evidence supporting a magnetic compass embedded in birds' visual systems remains unaffected, but we are left with only two studies that clearly implicate the ophthalmic branch of the trigeminal nerve, although not necessarily iron-related-structures, in magnetic sensing in birds. Therefore, for now, we have evidence supporting only a trigeminal-nerve-related magnetic sense in birds, not an iron-mineral-related magnetic sense. Both the biological function and basic sensory origin of the trigeminal magnetic sense are now unknown. Understanding the magnetic senses in animals indeed remains a formidable scientific problem.

(Adapted from *Nature*, April 19, 2012, written by Henrik Mouritsen)

Notes

- **Global Positioning System** 全球卫星定位系统
- **magnetite** 磁铁矿
- **maghemite** 磁赤铁矿
- **Prussian blue** 普鲁士蓝，一种古老的蓝色染料，可以用来上釉和做油画染料。
- **siderosome** 铁蛋白体

New Words

navigator ['nævɪgeɪtə]
n. someone whose job is to plan the direction in which a ship, airplane, or car should travel 航行者，航海家

retina ['retɪnə]
n. the part at the back of your eye that sends light signals to your brain, where they are changed into images 视网膜

macrophage ['mækrəfeɪdʒ]
n. a large cell that is present in blood, lymph, and connective tissues, removing waste products, harmful micro organisms, and foreign material from the bloodstream 巨噬细胞

homeostasis [ˌhəʊmiə'steɪsɪs]
n. a state of equilibrium or a tendency to reach equilibrium, either metabolically within a cell or organism or socially and psychologically within an individual or group 体内平衡，自我平衡，稳定状态

spherule ['sferjuːl]
n. a minute sphere or globule 小球，小球体

platelet ['pleɪtlət]
n. a small piece of a cell in your blood that helps it to clotform a thick mass 血小板，凝血细胞

dendrite ['dendraɪt]
n. any of the short branched thread like extensions of a nerve cell, which conduct impulses towards the cell body 枝状突起，树突

vesicle ['vesɪkl]
n. a cavity filled with air in a seaweed or water plant 囊，泡

ophthalmic [ɒf'θælmɪk]
adj. relating to the eyes and to illnesses of the eyes 眼的，眼科的

trigeminal [traɪ'dʒemɪnl]
adj. relating to or involving a trigeminal nerve 三叉神经的

robin ['rɒbɪn]
n. a small brown European bird with a red chest; a gray bird with a red chest that lives in North America（欧洲）鸲，知更鸟，（美洲）鸦

stimulus ['stɪmjələs]
n. anything that encourages something to happen, develop, or improve 刺激

respiratory [rə'spɪrətrɪ]
adj. relating to the process of breathing air in and out 呼吸的，呼吸作用的

organelle [ˌɔːgə'nel]
n. a specialized part of a cell; analogous to an organ 细胞器

ferritin ['ferɪtən]
n. an iron-binding protein found in the liver, that stores iron in the body 铁蛋白

Phrases and Expressions

be relevant to	有关，相关
be associated with	相关，涉及
identical to	同样的，相同的

Text Analysis

This passage is an expository writing which tries to explore the problems: what are the magnetic sensors and where do they locate? The passage can be roughly divided into three parts.

Paragraph A is part one, which is to arouse reader's interest in: how do birds sense the magnetic fields and where are their magnetic sensors.

The second part has five paragraphs, from Paragraphs B to F. This part tries to explain the research of magnetic sensors. Paragraphs B and C provide readers with the research founding from Fleissner and his colleagues: the structures, acting as magnetic sensors, locate in dendrites—nerve-cell endings and the structures have a large substructure like a vesicle. Paragraphs C and D offers a different claim from Treiber *et al*. They argue that the structures found by Fleissner *et al*. are not magnetic receptor cells, which are located along the upper beak and elsewhere in the pigeon. They also point out that the substructure is a nucleus. In Paragraphs E and F, the writer puts forward his own view. As to the location of the structures, he doubts the claim of Fleissner and colleagues and confirms the labor of Treiber *et al*.

Part three is made up of Paragraphs G and H. In Paragraph G, the writer draws a conclusion based on his examination. He challenges the explanation of Fleissner and colleagues. At the same time, he emphasizes Treiber and colleagues' result is not comprehensive. Finally, Paragraph H affirms Treiber and colleagues' achievement.

Word Roots

sens, sent 词根源于拉丁文 sentire (= to feel, to perceive 感觉)，过去分词为 sensus

同根词：

sensor	*n.*	传感器，感受器
sensory	*adj.*	感觉的，感觉器官的

sensible	*adj.*	明理的，可感觉的
sensitive	*adj.*	敏感的，易感光的
sensuous	*adj.*	感觉的，感官的

根据词根词缀猜下列词的词义：

1. sensorium	*n.*	________
2. sensational	*adj.*	________
3. sentimental	*adj.*	________
4. consentient	*adj.*	________
5. dissent	*v.*	________
6. extrasensory	*adj.*	________

fer 词根源于拉丁文 ferre（= to carry，to bring 运，载，to bear 忍耐）

同根词：

confer	*v.*	赋予，授予，商议
defer	*v.*	延期，延缓，顺从
deferential	*adj.*	恭顺的
deferment	*n.*	延期
inferential	*adj.*	推论上的
preferable	*adj.*	较合意，较好的

根据词根词缀猜下列词的词义：

7. ferry	*n.*	________
8. afferent	*adj.*	________
9. circumference	*n.*	________
10. efferent	*adj.*	________
11. aluminiferous	*adj.*	________
12. somniferous	*adj.*	________

ori 词根源于拉丁文 oriri（= to rise 升起，to begin，to grow 开始）

同根词：

orient	*v.*	使定向
	n.	东方
oriental	*adj.*	东方诸国的
orientate	*v.*	使向东，使定方向

reorientate	*v.*	再改方向，再定方位

根据词根词缀猜下列词的词义：

13. original	*adj.*	____________
14. originality	*n.*	____________
15. originative	*adj.*	____________
16. aboriginal	*adj.*	____________
17. disorient	*v.*	____________
18. originator	*n.*	____________

Synonyms

charge, price, fee, fare, cost, expense
这些名词均有“价格，费用”之意。

charge：指提供服务时索取的费用，也指货物的价格、价钱；作动词有索价，收费之意。

price：指商品在市场出售的价格，尤指卖方对商品所提出的单价。比喻意义指付出的代价。

fee：指上学、求医、请律师等付的费用，还可指会费、借书费、小费等。

fare：侧重指旅行时所付的车、船费等费用；也可指饮食、饭菜；作动词有进展，进行之意。

cost：指生产某东西的成本，也泛指商品的价格，可与 price 换用。

expense：常指实际支付的费用总数额，有时也指钱的花费。

Complete the following sentences with the proper form of the words listed above.

19. A new computer program ____________ around $20.

20. The farmhouse is ____________ at $198,000.

21. We now have a much clearer pictures of how the school is ____________.

22. They ____________ us $80 for three cups of teas.

23. You can claim part of your traveling bill as a business ____________.

24. She had a quarrel with the cab driver after refusing to pay her ____________.

25. What ____________ all your promises now!

control, direct, govern, manage, rule, supervise, administer 这些动词均有“管理，支配”之意。	**control**：含义广泛的常用词，指对人或物施以约束或控制的力量。 **direct**：侧重指行使领导或指导权。 **govern**：侧重指运用任何控制的权力来统治或管理一个国家、一个社会或一个部门，暗含能力和知识的运用。 **manage**：强调对具体事务机构进行管理，有时含受权管理或处理之意。 **rule**：强调用绝对或独裁的权力来管理或统治。 **supervise**：侧重指运用本身的或被授予的权力来管理、检查工作，含监督意味。 **administer**：指官方的或正式的对事务的管理。

Complete the following sentences with the proper form of the words listed above.

26. The spokesman from the central military claimed that the region was ___________ by the government again.
27. The foundation was formed specially to ___________ the project.
28. He needed to learn how to ___________ his time effectively.
29. His job was to ___________ all the PhD students from the Foreign Language Department.
30. With the help of advisers, the President will ___________ the military operations.
31. Most news media were ___________ by the government.
32. At that time, the emperor ___________ over most of Europe and North Africa.

Exercises

Questions 1—5

*The passage has eight paragraphs, **A—H**. Choose the correct heading for Paragraphs **A—B** and **D—F** from the list of headings below.*
*Write the correct number, **i—xii**, in blanks **1—5**.*

List of Headings

i How magnetic fields help birds

ii Based on two conflicting opinions, a new concept is put foreword

iii The location of magnetic sensors in birds

iv	The way birds sense the field
v	The discovery of the iron-mineral-containing structures
vi	The significance of magnetic-sense research
vii	Where compass needles are in birds
viii	The function of iron-mineral structures on helping birds
ix	The difference between people and birds
x	The way to distinguish macrophages and dendrites
xi	A different opinion from Fleissner and his colleagues
xii	The relationship between magnetic field and trigeminal nerve

1. Paragraph **A** ____________
2. Paragraph **B** ____________
3. Paragraph **D** ____________
4. Paragraph **E** ____________
5. Paragraph **F** ____________

Question 6—11

Complete the table below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

Research of Birds' Magnetic Sensor System

Researches	**Fleissner *et al.***	**Treiber *et al.***	**the author**
Findings	The structures are shown at six 6 __________ on a bird's upper beak, located in 7 __________ and they are presumed as the main 8 __________.	The structures are presented in 9 __________; and the spherules are called 10 __________.	The present proof indicates an 11 __________ of the trigeminal nerve magnetic sense in birds.

Question 12—14

Translate the sentences from the passage into Chinese.

12. By contrast, it is well known that many animals, including birds, use information from Earth's magnetic field to orient themselves, even over thousands of kilometers.

____

____

13. If these structures sense the magnetic field, this information must be transmitted to the

brain via the ophthalmic branch of the trigeminal nerve, as this is the only nerve that enters a bird's upper beak.

____

____

14. In conclusion, I find that serious doubt has been raised about the original proposals and that the burden of proof now lies with Fleissner and colleagues, if they still think that their structures are potential magnetic sensors.

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Section B

Reading Passage 2

Why Asks Jeeves?

A "It's a hell of a lot more fun and interesting than arguing over which actor should play what part in whatever movie," says Barry Diller. "I did that for 20 years of my life." Mr Diller, the Hollywood mogul turned internet pioneer, was explaining last year why the movie business now held less allure than buying yet another dotcom to add to his online conglomerate. This week he went shopping again and snapped up Ask Jeeves, a search website, in an all-shares deal worth $1.8 billion.

B Mr Diller's Interactive Corp (IAC) is a curious invention put together by an enigmatic man. Its future health may depend on how internet search evolves. Searching for information, products and prices through sites such as Google, Yahoo!, Microsoft's MSN and AOL is now one of the main uses of the internet, and the hottest area for online advertising, through the use of sponsored links. But Ask Jeeves trails in sixth place behind this bunch, with only a 1.8% market share, says Nielsen//Net Ratings, a firm of analysts. And competition is increasing. Amazon too has developed a powerful new search facility, called A9.

C But this business is relatively new and Mr Diller reckons there is still much to play for. After all, who would have forecast only a few years ago that

Amazon would sell more consumer-electronic goods than books? Or that eBay's hottest online auction category would be used cars? Or that online search could be hugely profitable business? (Not even Microsoft foresaw that, which is why it initially ignored the search business.)

D IAC is only nine years old. Mr Diller became captivated by the internet only after a successful career at Paramount Pictures, ABC, Fox Broadcasting and, finally, USA Networks (whose TV, cable and other entertainment assets he sold to France's Vivendi Universal for more than $10 billion in 2001). In recent years he has mostly been shopping online. In 1999, Mr Diller tried to merge with Lycos—then a hot "portal" which many said would come to rule the internet. The deal was sunk by shareholders, although Mr Diller still wonders about what might have been. Perhaps Lycos might have been the "unifying force" that he hopes Ask Jeeves will now become for his various businesses.

E Using IAC's various operations, a customer can get a date (or at least try, with match.com); book a flight (Expedia.com); find a hotel (hotels.com); make a restaurant reservation (Citysearch); take in a show (ticketmaster.com); buy a wedding ring (Home Shopping Network via TV or the internet); find a home (realestate.com) and a mortgage (lendingtree.com). So far, however, even Mr Diller cannot marry you online.

F As a group, despite Mr Diller's past talk of huge cross-selling opportunities, these businesses have never entirely connected up. Certainly there are synergies, says Mr Diller, and in some areas these have been exploited—such as links between lendingtree.com and realestate.com. But the result has left IAC rather difficult to understand and—more annoyingly for Mr Diller—its shares valued less generously than those of more focused internet firms such as Google or Amazon. So, Mr Diller is planing later this year to split up IAC. One part will be called Expedia, and will include all the travel-related businesses, and the other will continue to be called IAC and will be made up of the rest. In the fourth quarter to the end of December 2004, IAC's travel revenues grew by 11% to $496m, out of IAC's total revenue of $1.7 billion. Lumping all the businesses together was slowing IAC's growth, says Mr Diller. IAC was often perceived only as a travel company, because Expedia has become the world's leading online travel agent.

G Like some investors, Mr Diller worries about "disintermediation"—the internet's ability to eliminate middle-men. The popularity of booking

travel online has already driven many bricks-and-mortar travel agents out of business. Could search eventually do the same thing to online travel agents? Airlines, hotels and car rental firms increasingly want to drive bookings to their own websites, rather than rely on online agents to whom they must pay a commission. New search engines could give web surfers the ability to simply enter their travel itinerary and let the search engine get the best prices directly from suppliers.

Search and Search Again

H That is one reason why Mr Diller has decided to bolt a search firm on to IAC. But is Ask Jeeves, which was founded in California in 1996, the right one? It has a long way to go to catch up with the likes of Yahoo! and Google. But people often use more than one website when searching—especially when looking for product and price information. So perhaps Mr Diller can persuade more surfers to try Ask Jeeves—which works slightly differently from its bigger rivals, seeking answers to questions written in ordinary language rather than as a series of keywords.

I One way Mr Diller could try to boost the market share of Ask Jeeves is to feature its search box on his many websites. However, any hint that the results of a search on Ask Jeeves were being deliberately swung towards IAC websites could do serious damage; most users expect search engines to be impartial. As for advertising, Ask Jeeves gets most of its revenue from ads brokered for it by Google; will that relationship survive? The greatest opportunity may be to apply Ask Jeeves to the wealth of local information carried by Citysearch. Local search is one the most dynamic areas in internet search and offers the potential for a vast local online-advertising market.

J Mr Diller, who at 63 has been in business for a couple of decades longer than most other dotcom bosses, clearly has a challenge on his hands. But for the one mogul of old media who has consistently mad the right bets on the internet—contrast IAC with Time Warner's disastrous merger with AOL—navigating the evolving e-commerce business remains far more captivating than anything Tinseltown now has to offer.

(Adapted from *The Economist*, March 26, 2005, anonymous)

Notes

- **Ask Jeeves** 一种人工操作目录索引的美国著名搜索引擎，规模不大但很有特点。与其他关键词搜索引擎不同，Ask Jeeves 被设计成回答用户提问的自然语言引擎。搜索时，它

首先给出的是数据库中可能存在的答案，然后才是网站链接。

- **Barry Diller** 影视界巨子，曾任派拉蒙影片公司董事长，电视连续剧和电视电影的发明者，1996 年开始涉足网络。
- **disintermediation** 非中介化；脱媒现象。

New Words

mogul ['məʊgl]
n. a very wealthy or powerful businessman 显要人物，权势之人

conglomerate [kən'glɒmərət]
n. a group of diverse companies under common ownership and run as a single organization 集团，多种经营的大公司

enigmatic [ˌenɪg'mætɪk]
adj. not clear to the understanding 令人迷惑的，神秘的

captivate ['kæptɪveɪt]
vt. to attract; cause to be enamored 吸引，迷住，征服

unify ['juːnɪfaɪ]
vt. to bring or combine together or with something else 使成一体，一致

mortgage ['mɔːgɪdʒ]
n. a conditional conveyance of property as security for the repayment of a loan 抵押，贷款，按揭

impartial [ɪm'pɑːʃəl]
adj. free from undue bias or preconceived opinions 公平的，公正的

Phrases and Expressions

a hell of	相当，很，非常
argue over	争论，争辩
snap up	抢购，争购
so far	到目前为止，迄今，到此为止
split up	分手，分裂，（使）分离
perceive as	视作，认为，当作
drive out of	驱逐出，赶出
the likes of	同类的，同样的

Exercises

Questions 15—19

*The passage has ten paragraphs, **A–J**. Choose the correct heading for Paragraphs **A–C** and **E–F** from the list of headings below.*
*Write the correct number, **i–xiii**, in blanks **15–19**.*

List of Headings

i	A brief introduction of Diller's internet business and its challenge
ii	Diller's optimistic anticipation on internet business
iii	The future development of Ask Jeeves
iv	The services provided by IAC
v	Benefits surfers obtain from new search engines
vi	The reason why Diller's interest shifts from entertainment to internet
vii	The disadvantage of Jeeves
viii	The present problem faced by Ask Jeeves
ix	The problem of IAC
x	The effect search engine takes in a new situation
xi	The development direction of Jeeves
xii	IAC's current difficulty and upcoming reform

15. Paragraph **A** ____________
16. Paragraph **B** ____________
17. Paragraph **C** ____________
18. Paragraph **E** ____________
19. Paragraph **F** ____________

Questions 20—24

Complete the sentences below with the correct ending from the list below.
*Write the correct letter, **A–J**, in blanks **20–24**.*

List of Endings

A	sponsored links' adoption	**B**	his entertainment assets
C	evolution of internet search	**D**	shareholders
E	market share	**F**	travel company
G	firm of analysts	**H**	profitable business
I	realestate.com	**J**	lendingtree.com

20. People generally consider IAC as a/an ___________.

21. Diller tried to amalgamate with Lycos before he sold ___________.

22. The key point of the future development of IAC is ___________.

23. Those without sufficient money seek help from ___________.

24. AOL is the favorite of online advertisers thanks to ___________.

20. ___________ 21. ___________ 22. ___________ 23. ___________ 24. ___________

Questions 25—27

Translate the sentences from the passage into Chinese.

25. So perhaps Mr Diller can persuade more surfers to try Ask Jeeves—which works slightly differently from its bigger rivals, seeking answers to questions written in ordinary language rather than as a series of keywords.

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26. Local search is one the most dynamic areas in internet search and offers the potential for a vast local online-advertising market.

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27. Mr Diller, who at 63 has been in business for a couple of decades longer than most other dotcom bosses, clearly has a challenge on his hands.

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Reading Passage 3

On the Trail

The market in financial services for Native Americans is growing, thanks not least to Indian-owned banks.

A The Heart of the Comanche Indian nation sites on a hilltop next to Interstate 44 in south-central Oklahoma. From here the 12,000-member tribe, self-proclaimed "Lords of the Plains", oversees businesses that include four casinos, a funeral home, a housing authority, a water park and a

museum. The tribal budget has ballooned to $11m this year, thanks largely to money from gambling. Now there are plans for a 5,000-seat convention hall and a hotel. Despite past discrimination from some local bankers, the Comanche leadership—its chairman has a graduate degree from Harvard and the chief financial office runs a defence-contracting business—is talking with institutions including Merrill Lynch, Lehman Brothers, Bank of America and Bank of Oklahoma about finance for the project.

B Changes are afoot in Indian country, and financial institutions are taking notice. Recently Wells Fargo and J.P. Morgan Chase were among the sponsors of "Res 2005" in Las Vegas, and annual trade fair focused on economic loans and credit lines of about $1.5 billion, as well as mortgages, and Washington Mutual, which is in the mortgage business, tribal leaders contend that most of the nation's 2.4m Native Americans remain underserved. Hence the trend toward native-owned banks.

C Robert Williams, an expert on tribal law at the University of Arizona, says that Indian country is increasingly divided between the Comanche (with successful gaming ventures) and have-nots (everyone else). Generally, Native Americans are much poorer and less familiar with banking services than the average American. They are more likely to be denied conventional home-purchase loans. Tribal banks are stepping in to plug the gaps.

D The North American Native Bankers Association, a trade body, counts 19 banks nationwide that are owned by tribes or by individual Native Americans. Of these, 11 are in Oklahoma, a state with a rich mix of Indian groups but without huge reservations. Most of the banks are small, with average assets of only $79m, but several are growing fast, and serve not only Indians but other Americans too.

E One tribal bank gaining national attention is Bank 2, based in Oklahoma City. Wholly owned by the 40,000—member Chickasaw tribe and with $62m in assets (on September 30th 2004), it is growing player in the national market for mortgage lending to Indians, thanks in part to effective use of a federal home-loan guarantee programme known as Section 184 and a partnership with Fannie Mae, one of America's giant mortgage companies. About half of Bank 2's customers are Indians, and it does business with more than 80 tribes, including the Comanche. So far it has made no loans tied to casinos. Ross Hill, its president, and J.D. Colbert, who runs its Native American business, both former Federal Reserve officials, often criss-cross the country, speaking not only to prospective customers but also to other

tribes about starting their own banks.

F In Denver, a coalition of 18 Indian tribes, two Alaskan native groups and a tribal insurance consortium runs a venture called Native American Bank. The bank which has assets of $52m, focuses on underserved Indian communities in remote places. Its president, John Beirise, a non-Indian formerly with Continental Bank in Chicago and Mercantile Bank in St Louis, says that one of his unexpected challenges has been "the pervasiveness of politics" in Native American communities and the way it slows change.

G Indeed, some say that tribal politics and legal issues hinder Indians' economic advance more than a lack of banks does. "Banks are an effect, not a cause, of economic development," argues Joe Kalt, co-director of a Harvard programme on Indian economies. Questions of land trust and sovereignty complicate business dealing with tribes, although a growing number of groups are adopting the uniform commercial code and granting waivers that allow banks and other business recount damages should things go wrong.

H Steve Stallings, Wells Fargo's senior executive for native banking, says on other hand that dealing with tribes is "no different from doing business with certain kinds of regulated industries, doing international business." Even so, the lending gets clogged. Mr Stallings estimates he could double his bank's volume of Indian mortgage lending if trust issues were resolved more easily.

I Even non-casino tribes are getting sophisticated about the political and legal reforms needed to get business and finance moving. "They're like little developing countries," says Mr Kalt. Apparently, some people may even see them as models: he was recently invited to Poland, a country undergoing an economic transition of its own, to lecture on American Indian constitutions.

(Adapted from *The Economist*, February 19, 2005, anonymous)

Notes

- **Comanche** 科曼奇县，美国得克萨斯州的一个县，位于中得克萨斯与北得克萨斯的过渡地带。
- **Chickasaw** 契卡索人，美国马斯科吉印第安人一个部落成员，过去住在密西西比州北部和田纳西州的部分地区，现在住在俄克拉何马州。
- **Lehman Brothers Holdings Inc.** 雷曼兄弟控股，世界知名的投资公司。2008 年 9 月 15 日，由于受到次贷危机的严重影响，拥有 158 年历史的雷曼兄弟公司申请破产保护和重组。
- **Wells Fargo & Company** 美国富国银行创立于 1852 年，全球市值最高银行。

- **J.P. Morgan Chase** 摩根大通公司，为全球历史最长、规模最大的金融服务集团之一，由大通银行、J.P. 摩根公司及富林明集团在 2000 年完成合并。
- **Washington Mutual** 华盛顿互助银行，建立于 1889 年，是全美第四大居民住房抵押服务供应商，也是一家区域性的金融服务公司，为消费者和中小业户提供多样化的产品和服务。
- **Fannie Mae** (Federal National Mortgage Association，简称 Fannie Mae) 房利美，即联邦国民抵押贷款协会，成立于 1938 年，是最大的“美国政府赞助企业”，从事金融业务，用以扩大资金在二级房屋消费市场上流动的资金的专门机构。2008 年 9 月发生次贷危机以来由美国联邦住房金融局接管，从纽约证交所退市。
- **Denver** 丹佛，美国科罗拉多州首府。

New Words

oversee [ˌəʊvəˈsiː]
vt. to watch and direct 监督，监视，俯瞰

casino [kəˈsiːnəʊ]
n. a public building for gambling and entertainment 赌场，娱乐场

balloon [bəˈluːn]
vt. to become inflated 膨胀，涨大

afoot [əˈfʊt]
adj.& adv. on foot; walking 正在进行的（地），活动着的（地）

criss-cross [ˈkrɪskrɒs]
vt. to move or cause to move in a crosswise pattern 交叉往返，纵横交错于

coalition [ˌkəʊəˈlɪʃən]
n. the state of being combined into one body 结合体，同盟

consortium [kənˈsɔːtɪəm]
n. an association of companies for some definite purpose 财团，共同体

pervasiveness [pəˈveɪsɪvnəs]
n. the quality of filling or spreading throughout 无处不在，遍布

sovereignty [ˈsɒvrəntɪ]
n. government free from external control 国家的主权，主权国家

waiver [ˈweɪvə]
n. a formal written statement of relinquishment 弃权，放弃

clog [klɒg]
vt. to become or cause to become obstructed 阻碍，堵塞

Exercises

Questions 28—32

*The passage has nine paragraphs, **A–I**. Choose the correct heading for Paragraphs **B–F** from the list below.*
*Write the correct number, **i–xi**, in blanks **28–32**.*

List of Headings

i The conflicting opinion on Indians' economic advance
ii Brief introduction of the North American Native Bankers Association
iii Financial attention paid to the changes in Indian communities
iv The root reason for slow economic development in Indian country
v The development of the Camanche Indian nation
vi The obstacle Native American faced
vii Being a supplement, tribal banks' planning to provide banking service for Native Americans
viii An introduction of Native American Bank and its challenge
ix The main business of Bank 2
x The function of tribal banks

28. Paragraph **B** ____________
29. Paragraph **C** ____________
30. Paragraph **D** ____________
31. Paragraph **E** ____________
32. Paragraph **F** ____________

Question 33—37

*Do the following statements agree with the information given in the passage? In brackets **33–37**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

33. (　　　) The main financial source of Comanche comes from four casinos.
34. (　　　) Most of Native Americans are poor, yet they can get loan to buy their apartment.

35. (　　) Bank 2 is owned by tribes and only aims at serving Indians.

36. (　　) Native American Bank defines its main customers as those who can't enjoy the normal bank service.

37. (　　) Indian's economy would develop if government pours money into education.

Questions 38—40

Translate the sentences from the passage into Chinese.

38. Robert Williams, an expert on tribal law at the University of Arizona, says that Indian country is increasingly divided between the Comanche (with successful gaming ventures) and have-nots (everyone else).

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39. Ross Hill, its president, and J.D. Colbert, who runs its Native American business, both former Federal Reserve officials, often criss-cross the country, speaking not only to prospective customers but also to other tribes about starting their own banks.

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40. Mr Stallings estimates he could double his bank's volume of Indian mortgage lending if trust issues were resolved more easily.

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Unit 14

Section A

Reading Passage 1

Historical Drought Trends Revisited

A new assessment of drought trends over the past 60 years finds little evidence of all expansion of the area affected by droughts, contradicting several previous estimates.

The 2011-12 drought in the United States was reported as one of the most severe on record, and led to economic losses of billions of dollars. When such extreme events occur, a common question is whether they might be a result of climate change. Not only is this question far from trivial, but it is also more complex for droughts than for most other climate extremes. Sheffield et al. (Sheffield, J., Wood, E. F. & Roderick, M. L. *Nature* 491, 435-438 (2012)) report an overestimation of historical drought trends obtained using a method that served as the basis for historical drought assessments made in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), as well as for analyses in more recent publications.

The authors' results suggest a high uncertainty in global-scale drought trends over the past 60 years and little evidence of an increase in the total area affected by droughts. A recent IPCC assessment highlighted strong uncertainties in historical drought records and, in particular, inconsistent conclusions of studies carried out after the Fourth Assessment Report with respect to some regional drought trends. Sheffield and colleagues' results are consistent with this assessment, but also suggest that methodological issues may partly explain reported conflicting results in the literature.

Soil-moisture drought, which is of most relevance to agriculture, is induced by a deficit in the land water balance and is caused by lack of precipitation and/or excess evapotranspiration. Evapotranspiration refers to the moisture loss from soils, either through plant transpiration (water extracted by the plants and lost

through the leaves' stomata) or by direct evaporation from moist surfaces (such as bare soils, lakes, rivers, or water stored on top of leaves).

The key point addressed by Sheffield and colleagues is the contribution of evapotranspiration as a driver for droughts. Most approaches compute actual evapotranspiration as a function of potential evaporation—that is, the evaporation occurring from bodies of water. In their study, the authors evaluate the extent to which different formulations used for computing potential evaporation can affect resulting estimates of historical drought trends that are computed by means of a drought indicator called the Palmar Drought Severity Index (PDSI). It should be noted that evapotranspiration depends not only on potential evaporation in the PDSI but also on soil-moisture availability, an aspect not directly assessed by the authors.

The PDSI approach is commonly used to assess drought trends, although its validity for such applications is questionable because of several issues. One of these is the usual practice of estimating potential evaporation as if it were solely dependent on temperature and latitude—an estimation known as the Thornthwaite-based formulation. This formulation neglects the role of several other climate drivers of potential evaporation, in particular wind speed, relative humidity and solar and long-wave radiation. In addition, using temperature as a driver for drought overlooks the fact that, in dry conditions, the causal link is often reversed—that is, drought itself induces hot temperatures when the lack of soil moisture leads to a suppression of evaporative cooling.

In earlier studies, the rationale for using a formulation that relied only on temperature was the absence of credible long-term global data sets of other driving variables. Shefield et al. used a recently compiled data set for these variables to assess their impact on trends in potential evaporation and resulting drought computed using the PDSI. By applying the Penman-Monteith formulation, which considers these other drivers, the authors find much weaker trends than with the Thornthwaite formulation, and little evidence of an expansion of the area affected by drought in past decades.

The authors provide detailed evaluations of their results, as well as thorough explanations for the apparent conflict with previous studies that found few differences between PDSI drought trends obtained with the Penman-Monteith and Thornthwaite formulations. On the basis of this analysis, the main discrepancies in these previous studies seem to be rooted in slight differences in methodological approach, for example differences in the calibration periods used or the atmospheric forcing (data-set choice; data-gap filling, in some cases with

climatological data; and consideration of spurious trends in data sets). Clearly, the quality and reliability of the forcing data sets and lack of observations remain an issue for any assessment related to drought trends. Because of these uncertainties, Shefield and colleagues' investigation has its own limitations, as the authors themselves recognize. Therefore, their results will also need to be confirmed by other independent analyses.

The 2007 IPCC Fourth Assessment Report's conclusion that the area affected by droughts was "likely" to have increased in many regions since the 1970s had already been revised in a more recent IPCC special report on extreme events and disasters published earlier this year (the SREX Report). This report assessed that "there are still large uncertainties regarding observed global-scale trends in droughts", and highlighted regions in which drought trends have increased (southern Europe and West Africa) as well as those showing decreasing trends (central North America and north-western Australia). These reported regional trends agree with Sheffield and colleagues' results. Furthermore, the SREX Report did not provide any assessment of previous changes in the areas affected by droughts. Given Sheffield and colleagues' findings, this metric of drought (that is, the total land area affected by drought) seems rather ill defined, because the error range of their Penman-Monteith-based PDSI estimates does not exclude either positive or negative trends in this quantity.

The authors' results confirm the complexity of the processes that lead to changes in drought conditions, also discussed in the SREX Report. The findings imply that there is no necessary correlation between temperature changes and long-term drought variations, which should warn us against using any simplifications regarding their relationship. Furthermore, apart from the variables considered in potential evaporation, the PDSI has several other shortcomings, in particular those resulting from the simplicity of its water-balance-model. These may explain a reported tendency of the PDSI approach (even when using the Penman-Monteith formulation) to overestimate future drying trends when driven with climate-model output, compared with other estimates, including soil-moisture output of the climate models themselves. Future investigations should carefully consider these uncertainties, for instance in the context of palaeoclimate studies and when relating specific changes in global mean temperature to their effects on drought.

(Adapted from *Nature*, November 2012, written by Sonia I. Seneviratne)

Notes

- **The 2011–12 Southern United States drought** 2011 年—2012 年美国南部干旱是属于重

度或超重度级别的旱灾。受灾严重的地区有德克萨斯州，这个州的灾情从 2011 年 1 月起一直持续，损失严重。

- **Intergovernmental Panel on Climate Change** (IPCC) 政府间气候变化专门委员会，是附属于联合国之下的跨政府组织，在 1988 年由世界气象组织、联合国环境署合作成立，专责研究由人类活动所造成的气候变迁。其主要工作是发表与执行《联合国气候变化框架公约》有关的专题报告。
- **Palmar Drought Severity Index**（PDSI）Palmer 干旱指数，是一个基于降水量和温度的干燥程度的量规。它是由气象学家 Wayne Palmer 研发的，并在 1965 年首次发布。Palmer 指数在判定长期干旱——比如长达数个月的干旱——方面被证明是非常有效的，但在判断持续数周的干旱上稍差。
- **Thornthwaite-based formulation** 桑思韦特气候分类，由美国气候学家和地理学家 C. W. Thornthwaite 制定。这种气候分类方式监控土壤水分含量变化。它通过温度指数和干燥指数来确定一个地区的潮湿值，同时引入当地的平均气温、平均降水量和常见植被类型等因素。
- **Penman-Monteith equation** 彭曼–蒙特斯公式，通过日平均气温、相对湿度和太阳辐射数值来计算蒸发量。

New Words

trivial [trɪvɪəl]
adj. of little value or importance 琐碎的，无价值的，不重要的

methodological [ˌmeθədə'lɒdʒɪkl]
adj. relating to the system of methods and principles used in a particular discipline 方法学的，方法论的

precipitation [prɪˌsɪpɪ'teɪʃən]
n. rain, snow, sleet, or hail that falls to or condenses on the ground（雨等）降落，某地区降雨等的量

evapotranspiration [ɪvæpəˌtrænspɪ'reɪʃən]
n. the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants 土壤水分蒸发蒸腾损失总量

transpiration [ˌtrænspɪ'reɪʃən]
n. the emission of water vapor from the leaves of plants（植物叶片）蒸腾作用，蒸散

extract [ɪks'trækt]
vt. to obtain (a substance or resource) from something by a special method 提取，提炼

stomata ['stəʊmətə]
n.（植物）气孔（stoma 的名词复数）

formulation [ˌfɔːmjʊ'leɪʃən]
n. a particular expression of an idea, thought, or theory（想法或思想等的）系统阐述，公式化（的表述）

validity [və'lɪdətɪ]
n. the quality of having legal force or effectiveness 有效，合法性，效力

latitude ['lætɪtjuːd]
n. the angular distance of a place north or south of the earth's equator, or of the equator of a celestial object, usually expressed in degrees and minutes 纬度

discrepancy [dɪs'krepənsɪ]
n. an illogical or surprising lack of compatibility or similarity between two or more facts 悬殊，差异

calibration [ˌkælɪ'breɪʃən]
n. the action or process of calibrating an instrument or experimental readings 校准，标准化

climatological [ˌklaɪmətə'lɒdʒɪkl]
adj. involving or pertaining to the study of climate 与气候学有关的

spurious ['spjʊərɪəs]
adj. not being what it purports to be; false or fake 假的，伪造的

metric ['metrɪk]
n. a system or standard of measurement 度量标准

palaeoclimate ['pælɪəʊˌklaɪmət]
n. a climate prevalent at a particular time in the geological past 古气候

Phrases and Expressions

apart from 除此之外

Text Analysis

This passage looks into a revisit to historical drought trends based on Sheffield et al.'s report.

The first paragraph informs us that Sheffield et al. report an overestimation of historical drought trends obtained using a method that is widely adopted for analysis.

Paragraph 2 is about a large uncertainty in historical drought trends stated by Sheffield et al. and a recent IPCC assessment.

Paragraph 3 gives the explanation of soil-moisture drought and the definition of

evapotranspiration.

Paragraph 4 tells us that Sheffield and colleagues reveal in their study of computing potential evaporation with different formulations by PDSI, that evapotranspiration is a driver for droughts, which depends not only on potential evaporation but also on soil-moisture availability.

Paragraph 5 introduces that PDSI, which is commonly used to assess drought trends, has been questioned for several issues. One of these is using the Thornthwaite-based formulation which considers only temperature and latitude to estimate potential evaporation.

Paragraph 6 tells us that applying the Penman-Monteith formulation, which considers more drivers, to compute drought using PDSI, Sheffield et al. find much weaker trends than using the Thornthwaite-based formulation.

Paragraph 7 then goes on to reveal the result of the study: the different results between the two formulations seem to be rooted in the difference in methodological approach.

Paragraph 8 deals with a recent revision to 2007 IPCC Fourth Assessment Report's conclusion by SREX Report, which assesses strong uncertainties of global-scale drought trends.

The last paragraph, Paragraph 9 concludes that Sheffield and his colleagues' findings imply that there is no simplification in the relationship between temperature changes and long-term drought variations. These uncertainties should be considered in future investigations.

Word Roots

duce，duct 词根源于拉丁文 ducere（= to lead 领导，引导）

同根词：

induce	*vt.*	引诱，引起
abduct	*v.*	绑架，拐走
conduce	*v.*	促成，引起
conduct	*v.*	指挥，传导
deduce	*v.*	演绎，推论
deduct	*v.*	扣除
ductile	*adj.*	可延展的，柔软的，温驯的

根据词根词缀猜下列词的词义：

1. educe *v.* ____________
2. induction *n.* ____________

3. adduct	*v.*	________
4. seduce	*v.*	________
5. traduce	*v.*	________
6. semiconductor	*n.*	________

tract，treat 词根源于拉丁文 trahere（= to draw 拉拽，抽）

同根词：

extract	*vt.*	提取，（费力地）拔出
tractor	*n.*	拖拉机
retreat	*v.&n.*	撤退
abstract	*v.&n.*	抽去，摘要
	adj.	抽象的
attract	*v.*	吸引，招引
contractible	*adj.*	可收缩，收缩性的
contractile	*adj.*	有收缩性的

根据词根词缀猜下列词的词义：

7. detract	*v.*	________
8. distract	*v.*	________
9. protract	*v.*	________
10. retract	*v.*	________
11. subtract	*v.*	________
12. intractable	*v.*	________

cred 词根源于拉丁文 credere（=to believe 相信）

同根词：

credible	*adj.*	可信的，可靠的
credit	*n.*	信用，学分
	v.	信赖，归功于
creditable	*adj.*	值得称赞的，声誉好的
creditor	*n.*	债权人，债主
accredit	*v.*	誉为，归功于，信赖
discredit	*v.&n.*	不信任，怀疑

根据词根词缀猜下列词的词义：

13. credence	*n.*	________
14. credential	*n.*	________

15. credo *n.* ____________

16. credulity *n.* ____________

17. credulous *adj.* ____________

18. creed *n.* ____________

Synonyms

induce, persuade, urge, convince, counsel, coax
这些动词均有“劝说，劝导，劝诱”之意。

induce：指用讲道理来使某人做某事，通过影响或劝说、诱惑的方式使人相信某事或去做某事，且自己认为该事情为错误的或愚蠢的。

persuade：普通用词，指通过劝说、感情交流等而使对方做劝说者所希望的事。

urge：语气强，指不断地热情地规劝诱导。

convince：指凭行动、事实或言语使他人从思想感情上信服。

counsel：较正式用词，指对一些较重大事情所提出的劝告或建议。

coax：指用好话善意或耐心劝诱、哄骗某人做某事。

Complete the following sentences with the proper form of the words listed above.

19. The U.N. has ____________ both sides to honor the peace treaty.

20. I can't think what ____________ her to marry him.

21. Rescuers told us how they ____________ a man out of a suicide attempt.

22. He did finally come with us, though it took a long time to ____________ him.

23. Being a specialist in this field, he ____________ them to give up the plan.

24. He failed to ____________ the jury of his innocence.

opposite, contrary, adverse, reverse, converse
这些形容词均含“相反的，对立的”之意。

opposite：指位置、方向、行动或想法等完全相反。

contrary：一般指与某种主张、看法或行为等正好相反，隐含否定一方。

adverse：通常指危害利益的、生命的势力或条件等，侧重负面的，令人不愉快的。

reverse：指朝相反方向的或反面（背面）的。

converse：指在方向、行动或意见上相反的。

Complete the following sentences with the proper form of the words listed above.

25. Now arrange the numbers in ___________ order.

26. The introduction of such a tax would be ___________ to our policy.

27. He says she is satisfied, but I believe the ___________ to be true: she is dissatisfied.

28. On the ___________ side of the road from the school was a church.

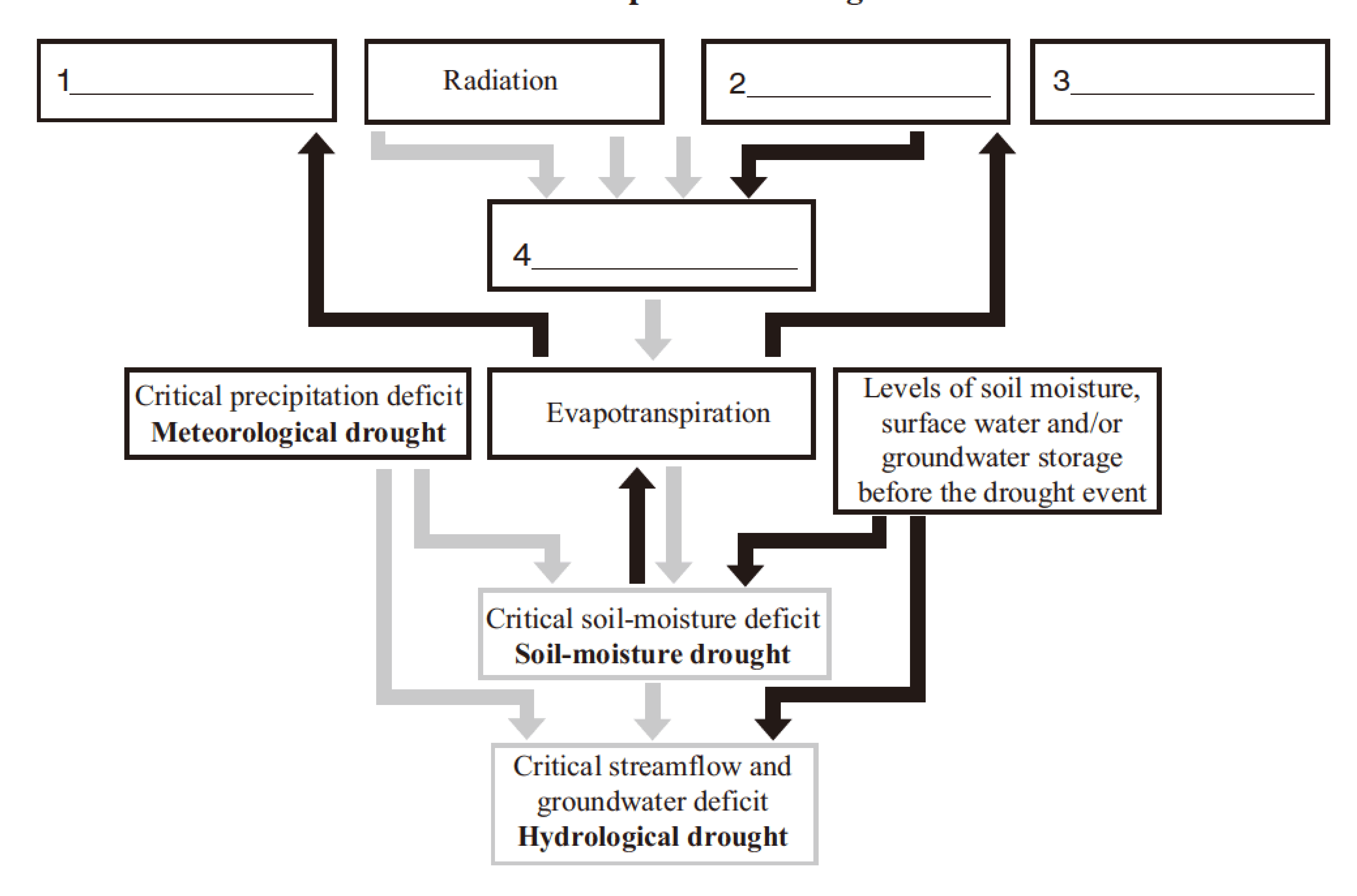
29. The effects of the disease can only be ___________ by a bone-marrow donation.

30. The drug has so far no ___________ effect on patients.

Exercises

Questions 1—4

Complete the chart below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*



Questions 5–10

*Do the following statements agree with the information given in the passage? In brackets **5–10**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

5. (　　) According to Sheffield et al., the actual historical drought trends are not so severe as estimated.
6. (　　) Historical drought trends are questioned.
7. (　　) Evapotranspiration also depends on forests.
8. (　　) The Penman-Monteith formulation considers more drivers than the Thornthwaite formulation does.
9. (　　) Shefield and colleagues' investigation of drought trends is accurate.
10. (　　) With Sheffield and colleagues' findings, this metric of drought seems properly defined.

Questions 11–12

Translate the sentences from the passage into Chinese.

11. Evapotranspiration refers to the moisture loss from soils, either through plant transpiration (water extracted by the plants and lost through the leaves' stomata) or by direct evaporation from moist surfaces (such as bare soils, lakes, rivers, or water stored on top of leaves).

____

____

12. The findings imply that there is no necessary correlation between temperature changes and long-term drought variations, which should warn us against using any simplifications regarding their relationship.

____

____

Section B

Reading Passage 2

Slowing Economy Gives Way to Global Role Reversals

The global slowdown stemming in part from the deepening U.S. financial crisis is hitting the world's richest nations the hardest even as emerging nations, some with once-fragile economies, are proving relatively resilient.

Consider, for instance, Britain. A severe housing slump and credit crunch sparked a 63 percent drop in new home mortgages in May compared with May 2007. Mirroring losses in the United States, the average home price in Britain fell to $344,704 in June, down 6.3 percent compared with June 2007, according to the Nationwide Building Society. The stock market in London slipped into bear market territory, joining New York's.

"It affects everybody, and you need not be a home owner, or have credit or be a consumer," said Martin Slaney, head of derivatives at GFT Global Markets in London. "People are getting used to a new terminology; they know all sorts of credit-crunch-related terms. Money can be made now, but generally it's a hugely unfortunate economic time. There's a lot of talk about how bad it is."

Contrast that with oil-fat Russia—a red-hot emerging market. As in many commodity-driven economies in the developing world, soaring energy revenue has largely insulated Russia, the world's second-largest oil exporter, from the turbulence in global markets. Its gross domestic product is expected to grow 8 percent this year, and consumer spending continues to boom, with a 13 percent increase so far this year, according to Troika Dialog, a Moscow investment house.

"We are overloaded with money, crazy amounts of money from the energy market," said Mikhail Bergen, a professor at Moscow's Higher School of Economics.

It marks a global economic role reversal of sorts. When financial crises hit the Asian markets in the 1990s and Argentina in 2001, the aftershocks spread to other emerging economies, plunging several into recession while wealthy countries went relatively unscathed. Rather than taking its toll largely on residents of developing countries, this economic downturn may cause the greatest damage to those living in the wealthiest countries on earth.

The U.S. economy and financial system are more closely linked to those in other wealthy nations, particularly in Europe, where rising inflation and the weak dollar are adding to growing trouble. The United States and Europe have "similar economies and share the potential problems of industrialized nations in terms of property price fluctuations and financials," said Simon Johnson, chief economist at the International Monetary Fund. "And they find themselves sharing variable degrees of vulnerability."

As global wealth has shifted during the past decade, emerging markets have become not only increasingly stable but they have also been claiming a larger portion of the world's riches than ever before. If Californians are rushing to withdraw money from banks there, the situation in Kenya is just the opposite: People are flocking to banks to open accounts. The Nairobi exchange, which lists mostly Kenyan companies and a handful of multinational firms, posted 10 percent gains in the three months ended in June as local and foreign investors flocked to the initial public offering of the cellphone giant Safaricom.

"I don't think there has been any impact," said Peter Wachira, a manager with AIG Global Investment in Nairobi, referring to the market turmoil. "Where markets in developed countries have been going down, ours has been going up."

That does not mean the emerging world is buffered completely, particularly if both the United States and Europe slip into recession or if the financial crisis in the United States claims more and bigger financial institutions. And without question, sectors of emerging economies are already being stung.

There is growing fear especially in the fastest-growing Indian technology markets, which include outsourcing, back-office operations and call centers. Those sectors are 70 percent dependent on the United States. Several Indian technology companies have slowed their hiring because of the U.S. economy's slowdown. In May, industrial output was up 3.3 percent, half the 6 percent increase in May 2007.

"I will have to lay off more if things don't pick up," said Rajiv Prem, a clothing manufacturer for U.S. retailers, including Anthropologie and Motherworks, who said the drop in orders has meant he had to close two of his three factories outside New Delhi.

Exports in China—the darling of the 21st-century economy—are also being hammered by slackening demand caused by the global slowdown and rising labor and material costs. Chen Gong, who runs a factory that makes plastic cleaning devices in Ningbo, a manufacturing city near Shanghai in the Yangtze River delta, has seen profits slip partly from the yuan's controlled

but steady rise against the dollar. It has slashed profit margins for many mid-size manufacturers from 15 to 3 percent. Many factories in nearby Guangdong province have closed their doors, and thousands of workers have lost their jobs.

"We'll just see who can survive this," Chen said. Experts predict as many as one-third of export manufacturers will close in the next three years.

Chinese exports to the United States have been flat this year and will likely experience a rare, overall decline by year-end, said Arthur Kroeber, managing director at Dragonomics, a research firm in Beijing. Yet experts said that might be exactly what China needs. A global slowdown—if tempered—could help China stage a soft landing for its breakneck economic growth.

"In some ways, this is not only welcome but desired by the Chinese." said Vikram Nehru, the World Bank's chief economist for East Asia and the Pacific.

(Adapted from *Washington Post*, July 17, 2008,
written by Anthony Faiola and Jill Drew)

Notes

- **Nationwide Building Society** 全英房屋抵押贷款协会，是英国最大的房屋贷款协会，为会员提供金融服务以资助其购房，通常为抵押贷款方式。总部位于英格兰斯文顿。
- **Global Forex Trading** (GFT) 全球外汇交易
- **International Monetary Fund** (IMF) 国际货币基金组织，于 1945 年 12 月 27 日成立，为世界两大金融机构之一，职责是监察货币汇率和各国贸易情况、提供技术和资金协助，确保全球金融制度运作正常，其总部设在华盛顿。
- **Kenya** 肯尼亚，非洲东部国家。
- **Nairobi** 内罗毕，肯尼亚的首都。
- **Safaricom** 肯尼亚重要的手机通讯公司，建于 1997 年，隶属于肯尼亚电讯公司。
- **New Delhi** 新德里，印度的首都。
- **Yangtze River delta** 长江三角洲

New Words

resilient [rɪ'zɪljənt]
adj. recovering readily from adversity, depression, or the like 能复原的，能立刻恢复精神的

slump [slʌmp]
n. a long-term economic state characterized by unemployment and low prices and low levels of trade and investment 暴跌

crunch [krʌntʃ]
n. a critical situation that arises because of a shortage (as a shortage of time or money or resources) 危急情况，经济收缩

derivatives [dɪ'rɪvətɪvz]
n. financial instrument whose value is based on another security 衍生性金融商品，派生物

terminology [ˌtɜːmə'nɒlədʒɪ]
n. a system of words used to name things in a particular discipline 专门名词，术语

red-hot ['red'hɒt]
adj. characterized by intense emotion or interest or excitement 赤热的，最新的

insulate ['ɪnsjʊleɪt]
vt. to protect from heat, cold, or noise by surrounding with insulating material 使隔离，使孤立

turbulence ['tɜːbjʊləns]
n. a state of violent disturbance and disorder (as in politics or social conditions generally) 骚动

aftershock ['ɑːftəʃɒk]
n. a tremor (or one of a series of tremors) occurring after the main shock of an earthquake 余震

recession [rɪ'seʃən]
n. the state of the economy declines; a widespread decline in the GDP and employment and trade lasting from six months to a year 经济衰退，后退

unscathed [ʌn'skeɪðd]
adj. not injured 未受伤害的

fluctuation [ˌflʌktjʊ'eɪʃən]
n. the quality of being unsteady and subject to changes 波动，起伏

multinational [ˌmʌltiː'næʃənl]
adj. involving or operating in several nations or nationalities 多国的，跨国的

turmoil ['təːmɔɪl]
n. a violent disturbance 混乱，焦虑

outsource [aʊt'sɔːs]
vt. to obtain goods or services from an outside supplier; to contract work out 外购（指从外国供应商等处获得货物或服务），外包（工程）

slacken ['slækən]
vi. & *vt.* to make less active or fast 放慢，减弱

delta ['deltə]
n. a low triangular area of alluvial deposits where a river divides before entering a larger body of water（河流的）三角洲

breakneck ['breɪknek]
adj. moving at very high speed 极快的

Phrases and Expressions

stem from 来自，起源于
bear market 空头市场
initial public offering 首次公开发售

Exercises

Questions 13—20

*Complete the table below. Choose **NO MORE THAN THREE WORDS** from the passage for each answer.*

Global Economic Situation under the Attack of the U.S. Financial Crisis

Country	Economic Situation	Economic Data
Britain	13__________ were triggered by a serious housing slump and credit crunch.	6.3 percent drop in the 14__________ compared with June 2007.
Russia	Because of oil, 15__________ has prevented Russia from turmoil in world markets.	It's GDP is expected to grow 8 percent this year.
U.S./Europe	They both have financials and 16__________ problems.	
Kenya	Many People rushed to the 17__________ of Safaricom.	posted 10 percent gains in three months.
India	Indian 18__________ are affected by the financial crisis because they rely on the U.S.	The industrial output was 3.3 percent, half the 6 percent increase in May 2007.
China	China was also hit by slackening demand, but a 19__________ could benefit China with a soft landing.	20__________ for mid-size producers have been cut down by 15 to 3 percent.

Questions 21–24

Look at the following statements and the list of people below. Match each statement with the correct person.
*Write the correct letter, **A–F**, in blanks **21–24**.*

List of People		
A Martin Slaney	**B** Mikhail Bergen	**C** Simon Johnson
D Peter Wachira	**E** Rajiv Prem	**F** Vikram Nehru

21. If the economic situation continues, he would have to dismiss more employees.
22. His country insulated from the influence of the financial crisis.
23. China should thank the financial crisis.
24. People learnt new words related to credit crunch.

21. ____________ 22. ____________ 23. ____________ 24. ____________

Questions 25–26

Translate the sentences from the passage into Chinese.

25. The global slowdown stemming in part from the deepening US. financial crisis is hitting the world's richest nations the hardest even as emerging nations, some with once-fragile economies, are proving relatively resilient.

____

____

26. Rather than taking its toll largely on residents of developing countries, this economic downturn may cause the greatest damage to those living in the wealthiest countries on earth.

____

____

Reading Passage 3

Demand for Data Puts Engineers in Spotlight

In Silicon Valley, the stars have long been charismatic marketing visionaries and cool-nerd software wizards. By contrast, mechanical engineers who design and run computer data centers were traditionally regarded as little more than blue-collar workers in the high-tech world.

For years, they toiled in relative obscurity in the engine rooms of the digital economy, amid the racks of servers and storage devices that power everything from online videos to corporate e-mail systems. Their mission was to keep the computing power plants humming, while scant thought was given to rising costs and energy consumption.

Today, data center experts are no longer taken for granted. The torrid growth in data centers to keep pace with the demands of Internet-era computing, their immense need for electricity and their inefficient use of that energy pose environmental, energy and economic challenges, experts say.

That means people with the skills to design, build and run a data center that does not endanger the power grid are suddenly in demand. Their status is growing, as are their salaries—climbing more than 20 percent in the last two years into six figures for experienced engineers.

"The data center energy problem is growing fast, and it has an economic importance that far outweighs the electricity use," said Jonathan G. Koomey, a consulting professor of environmental engineering at Stanford. "So that explains why these data center people, who haven't gotten a lot of glory in their careers, are in the spotlight now."

"At one time, we were seen as sheet metal jockeys," said Chandrakant Patel, a mechanical engineer at Hewlett-Packard Labs who has worked in Silicon Valley for 25 years. "But now we have a chance to change the world for the better, using engineering and basic science."

There is no letup in the demand for data center computing. Digital Realty Trust, a data center landlord with more than 70 facilities, says that customer demand for new space is running 50 percent ahead of its capacity to build and equip data centers for the next two years. "We're building the railroads of the future, and we can't keep up," said Chris J. Crosby, a senior vice president at Digital Realty.

For every new center, new data center administrators need to be hired. "It takes us eight months to find a guy to run a data center," said Mr. Crosby.

Indeed, some data managers with only a degree from a two-year college can command a $100,000 salary. Trade and professional conferences for data center experts, unheard of years ago, are now commonplace. Five-figure signing bonuses, retention bonuses and generous stock grants have become ingredients in the compensation packages of data center experts today.

Paul Marcoux knows the feeling of being wanted. Cisco Systems, giant Silicon

Valley maker of equipment used in data centers, recently held a nationwide search for a vice president for "green engineering." It needed someone who could manage the traditional information technology functions as well as increasingly important mechanical and electrical systems.

Last November, Cisco found Mr. Marcoux, an electrical engineer with an M.B.A. working at American Power Conversion, a manufacturer of power supplies and air-conditioners for data centers. Mr. Marcoux, 57, worked on the design and construction of about 100 data centers in his 30-year career.

"To really make progress, we have to bridge the analog and the digital worlds," said Mr. Marcoux.

At Cisco, Mr. Marcoux is applying his experience to improving the company's data centers and its products, so that its computers increasingly can communicate with the coolers and power generators. "Our products need to talk to the power supplies and air-conditioners instead of being standalone boxes," he explained.

The pace of the data center building is the result of the surging use of server computers, which in the United States rose to 11.8 million in 2007, from 2.6 million a decade earlier, according to IDC, a research firm. Worldwide, the 10-year pattern is similar, with the server population increasing more than fourfold to 30.3 million by 2007.

"For years and years, the attitude was just buy it, install it and don't worry about it," said Vernon Turner, an analyst for IDC. "That led to all sorts of inefficiencies. Now, we're paying for that behavior."

The problem is that most computers in data centers run at 15 percent or less of capacity on average, loafing the rest of the time, though consuming electricity all the while. (In the old days, when they housed a few large computers, data centers were far more efficient. Mainframe computers run at 80 percent of capacity or more.)

The computers also generate a lot of heat, so much so that half of the energy consumed by a typical data center is for enormous air-conditioners, fans and other industrial equipment used mainly to cool the high-tech facilities.

The nation's data centers doubled their energy consumption in the five years to 2006, exceeding the electricity used by the country's color televisions, according to the latest government estimates.

The availability of electricity, not just its cost, presents a threat to the continued

expansion of data center computing that can hamper companies across the economy, as they increasingly rely on information technology.

(Adapted from *New York Times*, June 17, 2008, written by Steve Lohr)

Notes

- **Digital Realty Trust** 数字房地产信托公司，这家公司帮助全球的客户建设数据中心。
- **Cisco Systems** 思科系统公司，创建于 1984 年，是全球领先的互联网设备供应商，在纳斯达克上市。
- **Hewlett-Packard Labs** 惠普实验室
- **American Power Conversion** (APC) 美国电力转换公司，总部位于美国罗得岛西金斯敦，业务集中在四个主要应用领域：家庭 / 小型办公室、商务网络、数据中心和设施、接入供应商网络。

New Words

charismatic [ˌkærɪz'mætɪk]
adj. possessing an extraordinary ability to attract 有魅力的

visionary ['vɪʒəˌnerɪ]
n. a person with unusual powers of foresight 空想家，预言家，有智慧的人

wizard ['wɪzəd]
n. someone who is dazzlingly skilled in any field 有特殊才干的人，奇才

toil [tɔɪl]
vi. to work hard 长时间或辛苦地工作

obscurity [əb'skjʊərətɪ]
n. the state of being indistinct or indefinite for lack of adequate illumination 昏暗

hum [hʌm]
vi. to make a low continuous sound 发嗡嗡声

scant [skænt]
adj. less than the correct or legal or full amount often deliberately so 不足的，缺乏的

torrid ['tɒrɪd]
adj. extremely hot 晒热的，灼热的

jockey ['dʒɒkɪ]
n. an operator of some vehicle or machine or apparatus 驾驶员，操作者

letup ['letˌʌp]
n. a pause during which things are calm or activities are diminished 停止，终止，减弱

retention [rɪ'tenʃən]
n. the act of retaining something 滞留，扣留

analog ['ænəlɔːg]
n. something having the property of being analogous to something else 类似物，模拟

fourfold ['fɔːfəʊld]
adj.&adv. four times as great or many 四倍的，四重的

loaf [ləʊf]
vi. to be lazy or idle 游荡，游手好闲

mainframe ['meɪnfreɪm]
n. (computer science) the part of a computer (a microprocessor chip) that does most of the data processing 中央处理机，主机

hamper ['hæmpə]
vt. to prevent the progress or free movement of 妨碍，束缚，限制

Phrases and Expressions

power grid 电力网
sheet metal 金属片

Exercises

Questions 27—31

*Do the following statements agree with the information given in the passage? In brackets **27–31**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

27. (　　) In the past, people who worked in Silicon Valley were considered as people with low status.

28. (　　) Mechanical engineer worked hard without being noticed.

29. (　　) The rapid growth in data centers is environmentally friendly.

30. (　　) Now people who can manage a data center without burdening power supply are needed.

31. (　　) Every year, hundreds of graduates apply for data center experts.

Questions 32—38

Complete the table below. Choose ***NO MORE THAN FOUR WORDS*** *from the passage for each answer.*

People and Their Opinions on Data Center Engineers

Name	Profession	Opinion
Jonathan. G. Koomey	A consulting professor	Both energy problem and 32 ________ of the data center put the experts in 33 ________.
Chandrakant Patel	A mechanical engineer	Engineers now can change the 34 ________.
Chris J. Crosby	A senior vice president	It's hard to find a 35 ________ engineer.
Paul Marcoux	A /An 36 ________	Our products cannot be 37 ________.
Vermon Turner	An analyst	The attitude that governed our 38 ________ resulted in a range of inefficiencies.

Questions 39—40

Translate the sentences from the passage into Chinese.

39. Five-figure signing bonuses, retention bonuses and generous stock grants have become ingredients in the compensation packages of data center experts today.

____

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40. The pace of the data center building is the result of the surging use of server computers, which in the United States rose to 11.8 million in 2007, from 2.6 million a decade earlier, according to IDC, a research firm.

____

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Unit 15

Section A

Reading Passage 1

A Really Serious Conflict

Transforming a laboratory finding into a new medicine involves numerous steps and stakeholders. In a simple case, a researcher discovers and publishes a new target, and an academic or industrial organization decides to commercialize it. After an initial period of development, this organization licenses the target or a lead compound to a pharmaceutical company with a view to take it to the market. The company sponsors clinical trials, the results of which are also published and evaluated by regulatory agencies that ultimately approve the new therapy for its use in humans. The company then promotes its new product to claim the largest possible share of the market. In an ideal scenario, a postmarketing follow-up of the compound gives the regulators further evidence to evaluate the safety and efficacy of the new medicine.

During this long process, money changes hands many times. A university filing for a patent creates a competing financial interest (CFI) for itself and for the researcher who made the discovery. Licensing a target or a lead to a company generates hefty revenue for the institution that owns the intellectual property. A pharmaceutical firm deciding on the best strategy to advance its drug-discovery program solicits the views of top scientists, who are financially rewarded for their advice. The pharmaceutical industry remunerates the clinicians in charge of running clinical trials. And, once the compound is ready for the patient, companies do not hesitate to use perks to turn doctors into strong advocates of the product—essentially extensions of their marketing machinery.

These CFIs can have a pernicious influence on translational research, the most negative effect of which is exposing patients to unsafe drugs. Our awareness of this harmful influence has increased over time, owing to highly publicized cases of dangerous drugs withdrawn from the market and to the advocacy of a series of journals, newspapers and scientists who have turned the fight against CFIs into a

true crusade.

As a result of this increased awareness of CFIs, all parties involved have devised a series of measures to deal with them. Some institutions have banned their staff from consulting for or from owning stock. Policymakers have passed laws that prevent doctors from accepting presents from companies and companies from handing out gifts. Journals often ask authors to declare all of their CFIs as a prerequisite for publication of their work and may even ban some scientists from authoring reviews or editorials if they report a financial interest.

One thing that the items in this list have in common is their regard for CFIs as a monolithic scourge; what matters is that we expose all conflicts and show as little tolerance as possible for those who have them, regardless of their nature. But even though a lot has been written about this subject, it is seldom acknowledged that not all CFIs are equally insidious and that some are even necessary for the success of translational research.

Scientists who share their expertise with a company and clinicians who agree to conduct a clinical trial have to be compensated for their work in the same way that every other professional ought to be rewarded for his or her labor. To suggest that they should make their contributions freely is disingenuous, and to argue that they should not get involved at all can only slow the development of new medicines.

Academic institutions and their employees must be free to benefit financially from the fruits of the advances made in their laboratories, either by independently developing them into products or by selling them to the highest bidder. In the US, the Bayh-Dole Act has protected this right for nearly three decades, and CFIs that result from a university's right to enact this policy should not raise eyebrows.

The media have taken to heart their duty to report on cases in which CFIs affect the welfare of the public, and an increasing number of scientific journals rightly alert their readers to the CFIs of the authors of the articles they publish. However, a second issue that is seldom acknowledged is the profound inefficiency of the prevailing caveat emptor approach for ensuring the integrity of translational research—recording the existence of CFIs and letting the readers make whatever they wish of that information.

There is evidence that published trials sponsored by a company with a financial interest in the outcome are more likely to work in favor of the sponsor. However, the fact remains that clinical trials are very expensive, and only the pharmaceutical

sector has both the incentive and the deep pockets to pay for them. Furthermore, emphasizing evidence of this type shifts our attention away from a more serious concern: the possibility of scientific fraud.

If there is one reason we need to worry about CFIs, it is because they could lead to misconduct whenever a researcher has a financial incentive to fabricate data. So, if a clinical trial goes ahead on the basis of fraudulent preclinical work or if a drug is approved on the basis of false clinical data, the problem is more profound than can be addressed by the declaration of a CFI. Researchers or clinicians who produce sham data to continue receiving funds from a company must be subject to severe disciplinary actions from their institutions and funding bodies. Companies that conceal negative data from regulators to receive approval for their drug should face not only fines but also penalties as serious as criminal charges. In any case, the focus should move away from CFI declarations and toward exposing and punishing scientific misconduct.

A third issue that is rarely acknowledged is that the stridency with which the CFI crusaders fight financial interests has created a milieu in which pharmaceutical firms have increasingly less breathing space to conduct their business, leading to a further slowing of drug development. As a result, companies have begun to embark on their own crusade to change their image, looking for opportunities to collaborate with policymakers, journals and the public to promote transparency.

Although this initiative is to be welcomed, the irony is that some of the companies' ideas are so bold that the system does not seem tone ready for them. For example, in offering to help academic institutions keep track of the members of their staff who have dealings with the pharmaceutical industry, some companies are willing to publish lists of all the people who receive money from them, along with how much and for what concept. Here, it is the academic institutions that are dragging their feet, not being willing to deal with embarrassing disclosures that might arise or not even being able to manage this information.

There is no point in denying that pharmaceutical companies have a history of devious dealings that have rightfully tarnished their reputation. But if they are now really serious about changing for the better, it would be a shame not to seize the opportunity for an armistice. We could start by abandoning the inquisitorial attitude with which CFIs are judged, trying instead to engage in a true dialogue among all stakeholders. It would also help if we stopped pretending that money is not one of the most powerful motivators to push innovations in healthcare. Let us

instead accept that most financial interests do not represent a conflict as a matter of course and that the influence of money is negative only if it leads to scientific fraud—the one infidel we need to burn at the crusader's stake.

(Adapted from http://www.nature.com/nm/journal/v15/n5/full/nm0509-463.html, anonymous)

Notes

- **clinical trials** 临床试验，是指任何在人体（病人或健康志愿者）进行药物的系统性研究，以证实或揭示试验药物的作用、不良反应及/或试验药物的吸收、分布、代谢和排泄，目的是确定试验药物的疗效与安全性。
- **translational research** 转化型研究，一般是指将基础科学发现应用到治疗或预防疾病或损伤，目的在于探索或发展可产生有效疗法的可能性。主要应用于医学、行为科学和社会科学的研究中。
- **Bayh-Dole Act**《拜杜法案》，由美国国会参议员 Birch Bayh 和 Robert Dole 提出，被纳入美国《专利法》第 18 章，标题为“联邦资助所完成发明的专利权”。在科学家投入基础研究后，将会发展出可用技术及产品，此时便需要智慧财产权即专利权归属的保护。

New Words

stakeholder ['steɪkhəʊldə]
n. people who have an interest in a company's or organization's affairs 股东，利益相关者

commercialize [kə'mə:ʃəlaɪz]
vt. to exploit for maximal profit, usually by sacrificing quality（尤指不择手段地）牟利，商业化

regulatory [regjʊ'leɪtərɪ]
adj. restricting according to rules or principles 管理的，调整的

efficacy ['efɪkəsɪ]
n. capacity or power to produce a desired effect 功效，效力

filing ['faɪlɪŋ]
n. the entering of a legal document into the public record 整理成档案，文件归档

patent ['peɪtənt]
n. a document granting an inventor sole rights to an invention 专利，专利权

hefty ['heftɪ]
adj. large in size, weight, or amount（体积、重量或数量）巨大的

solicit [sə'lɪsɪt]
vi. & *vt.* to ask money, help, support, or an opinion from someone 请求给予（金钱、帮助、支持等），征求（意见）

remunerate [rɪ'mju:nəreɪt]
vt. to make payment to; compensate 酬劳

clinician [klɪ'nɪʃən]
n. a doctor who specializes in clinical work 临床医生，门诊医师

perk [pɜ:k]
n. special benefits that are given to people who have a particular job or belong to a particular group 额外津贴，外快

pernicious [pə'nɪʃəs]
adj. exceedingly harmful 致命的，险恶的，引起巨大伤害的，毁灭性的

crusade [kru:'seɪd]
n. a series of actions advancing a principle or tending toward a particular end（宗教性的）圣战，改革运动

monolithic [mɒnə'lɪθɪk]
adj. characterized by massiveness and rigidity and total uniformity 整体的，庞大的

scourge [skɜ:dʒ]
n. something that causes a lot of trouble or suffering to a group of people 灾难，祸害

insidious [ɪn'sɪdɪəs]
adj. something unpleasant or dangerous and develops gradually without being noticed 潜在的，阴险的，狡猾的

disingenuous [ˌdɪsɪn'dʒenjʊəs]
adj. slightly dishonest and insincere 不真诚的，不坦率的

caveat ['kævɪæt]
n. a warning of a specific limitation of something such as information or an agreement 警告，附加说明注意事项

emptor ['emptə]
n. a person who buys certain goods 买者，买家

fraudulent ['frɔ:djʊlənt]
adj. deliberately deceitful, dishonest, or untrue 欺骗的，不诚实的，奸诈

sham [ʃæm]
adj. adopted in order to deceive 虚假的，假装的

disciplinary ['dɪsɪplɪnərɪ]
adj. relating to discipline in behavior 惩戒性的，执行纪律的

stridency ['straɪdnsɪ]
n. the quality of being strident 强硬，咄咄逼人，坚定

milieu ['miːljəː]
n. the group of people or activities that you live among or are familiar with 周围，环境，社会背景

embark [ɪm'bɑːk]
vi. to go on board; to start doing something 上飞机，上船，着手，从事

disclosure [dɪs'kləʊʒə]
n. the act of giving people new or secret information 揭露，被公开的事情，被披露的秘闻

devious ['diːvɪəs]
adj. characterized by insincerity or deceit; evasive 不正直的，不坦诚的，狡猾的，不正当

tarnish ['tɑːnɪʃ]
vt. to make dirty or spotty, as by exposure to air 玷污，败坏

armistice ['ɑːmɪstɪs]
n. a state of peace agreed to between opponents so they can discuss peace terms 停火，停战，休战协议

inquisitorial [ɪnˌkwɪzɪ'tɔːrɪəl]
adj. marked by inquisitive interest; especially suggestive of an ecclesiastical inquisitor（宗教法庭）审判官似的，爱打听的，寻根究底的

infidel ['ɪnfɪdəl]
n. a person who does not acknowledge your god 不信宗教的（人），异教徒

Text Analysis

The passage is made up of three parts.

Part one consists of the first four paragraphs. It's about the process of developing new medicine which often involves harmful financial interest. Paragraph 1 introduces that transforming a laboratory finding into a new medicine involves numerous steps and stakeholders. Paragraph 2 states that money changes hands many times during this long process. Paragraph 3 points out the harmful influence of CFIs, the most negative effect of which is exposing patients to unsafe drugs. Paragraph 4 illustrates how all parties involved take measures to deal with CFIs.

Part two is made up of eight paragraphs, from Paragraph 5 to Paragraph 12. It is about three issues regarding drug developing and CFIs. Paragraph 5 to Paragraph 7 are about the first issue.

Paragraph 5 points out the seldom acknowledged issue that not all CFIs are equally insidious and that some are even necessary for the success of translational research. Paragraph 6 states that scientists and clinicians who helped develop new medicines have to be compensated for their work. Paragraph 7 claims that academic institutions and their employees must be free to benefit financially from the fruits of the advances made in their laboratories in certain ways. Paragraph 8 to Paragraph 10 are about the second issue. Paragraph 8 points out the inefficiency of the prevailing caveat emptor approach for ensuring the integrity of translational research. Paragraph 9 argues that the possibility of scientific fraud should be a more serious concern than finding evidence against sponsor companies. Paragraph 10 stresses that the focus should move away from CFI declarations and toward exposing and punishing scientific misconduct. Paragraph 11 and Paragraph 12 are about the third issue. Paragraph 11 points out the slowing of drug developing and the pharmaceutical firms' desire to change their image as the result of the CFI crusaders' efforts. Paragraph 12 states that some companies' ideas are too bold for the system to be ready for them.

Part three is the last paragraph, Paragraph 13. In this part, the author gives his advice about the issue under discussion. We could start by abandoning the inquisitorial attitude with which CFIs are judged, trying instead to engage in a true dialogue among all stakeholders.

Word Roots

clud，clos 词根源于拉丁文 claudere（= to shut 关闭）

同根词：

closure	*n.*	封闭，结尾，中止
disclosure	*n.*	揭发，泄露
enclose	*v.*	围绕，（随函）附寄
closet	*n.*	壁橱，小房间
exclude	*v.*	排除，赶出
exclusive	*adj.*	排外的，独占的
include	*v.*	包含，包括

根据词根词缀猜下列词的词义：

1. occlude	*v.*	________
2. preclude	*v.*	________
3. recluse	*n.*	________
4. seclude	*v.*	________

5. claustrophobia	*n.*	________
6. exlusionism	*n.*	________

quire，quisit，quest 词根源于拉丁文 quaerere（= to seek 追求）

同根词：

quest	*n.&v.*	探寻，搜寻
questionable	*adj.*	可疑的，引起争论的
acquire	*v.*	获得
acquisition	*n.*	获得，习得
perquisite	*n.*	额外补贴，犒赏
requisite	*n.*	必需品
	adj.	必须的
prerequisite	*n.*	首要的事物，必备的事物

根据词根词缀猜下列词的词义：

7. questionnaire	*n.*	________
8. conquer	*v.*	________
9. disquisition	*n.*	________
10. exquisite	*adj.*	________
11. inquiry	*n.*	________
12. inquisitive	*adj.*	________

fid 词根源于拉丁文 fidere（= trust 相信）

同根词：

fidelity	*n.*	忠贞，忠诚
confide	*v.*	信任，信赖
confidant	*n.*	密友，知己
confidence	*n.*	信心
infidel	*n.*	不信宗教的（人），异教徒

根据词根词缀猜下列词的词义：

13. confidential	*adj.*	________
14. diffidence	*n.*	________
15. infidelity	*n.*	________
16. defiant	*adj.*	________
17. perfidy	*n.*	________
18. perfidious	*adj.*	________

Synonyms

age, epoch, era, period, times
这些名词均含“时期，时代”之意。

age：常指具有显著特征或以某杰出人物命名的历史时代或时期。

epoch：正式用词，侧重指以某重大事件或巨大变化为起点的新的历史时期。

era：书面语用词，指历史上的纪元、年代，可与 epoch 和 age 互换，侧重时期的延续性和整个历程。

period：最普通用词，概念广泛，时间长短不限，既可指任何一个历史时期，可指个人或自然界的一个发展阶段。

times：侧重某一特定时期。

Complete the following sentences with the proper form of the words listed above.

19. We are living in a computer ___________.
20. In medieval ___________ the church held sway over many countries.
21. It was an ___________ of great intellectual excitement.
22. The long dry ___________ ended with torrential rain.
23. The Relative Theory marked a new ___________ in mathematics.

disaster, calamity, catastrophe, misfortune
这些名词均表示“灾难”或“不幸”之意。

disaster：普通用词，指大破坏、痛苦或伤亡。

calamity：多指个人的不幸，比 disaster 严重，强调灾难引起的悲痛以及对于损失的感觉。

catastrophe：语气最强，指可怕的灾难，强调突如其来的灾难和最终的结局。

misfortune：普通用词，多指较为严重的不幸，强调不幸多由外界因素所致。

Complete the following sentences with the proper form of the words listed above.

24. There are worse ___________ than failing your driving test.
25. They had the ___________ to be hit by a violent storm.
26. ___________ struck when the plane’s engine exploded shortly after take-off.
27. The earthquake, along with the tsunami, was a ___________ .
28. She bore her ___________ bravely.

Exercises

Questions 1—5

*Choose the correct letter, **A**, **B**, **C**, or **D**. Write the correct letter in blanks **1–5**.*

1. In the long process of turning a laboratory finding into a new medicine, the evaluation of the results of clinical trials is conducted by ____________.
   A pharmaceutical company
   B clinician
   C regulatory agencies
   D a researcher

2. The pharmaceutical industry pays the clinicians who take charge of carrying out ____________.
   A competing financial interest
   B licensing a target
   C clinical trials
   D advocating the product

3. Which of the words below has the similar meanings with *pernicious* in the first line of Paragraph 3?
   A beneficial
   B harmful
   C far-reaching
   D profound

4. What measures have been worked out to deal with CFIs?
   A Some institutions have prohibited their working staff from giving advice for or from possessing stock.
   B Laws have been made to allow doctors to accept gifts from pharmaceutical companies.
   C Laws have been made to allow pharmaceutical companies to hand out presents.
   D Journals do not ask authors to state all of their CFIs before publishing their works.

5. Without the participation of scientists and clinicians, the development of new would ____________.
   A not be affected
   B accelerate
   C slow down
   D be better

1. ____________ 2. ____________ 3. ____________ 4. ____________ 5. ____________

Questions 6—10

Complete the sentences below. Choose ***ONE WORD ONLY*** *from the passage for each answer.*

6. In America, the Bayh-Dole Act has protected academic institutions' and their employees' right to freely benefit from the fruits of the advances made in their laboratory for three ___________.

7. More and more journals informed their readers of the CFIs of the ___________ of the articles they publish.

8. Since clinical trials are very expensive, only the ___________ sector has both the motive and wealth to pay for them.

9. In any case, the emphasis should shift away from CFI declarations and move toward revealing and penalizing scientific ___________.

10. Companies are searching for chances to work with policymakers, journals and the public to promote ___________.

Questions 11—13

Translate the sentences from the passage into Chinese.

11. What matters is that we expose all conflicts and show as little tolerance as possible for those who have them, regardless of their nature.

____

____

12. Scientists who share their expertise with a company and clinicians who agree to conduct a clinical trial have to be compensated for their work in the same way that every other professional ought to be rewarded for his or her labor.

____

____

13. There is no point in denying that pharmaceutical companies have a history of devious dealings that have rightfully tarnished their reputation.

____

____

Section B

Reading Passage 2

Religious Leaders Weigh in on Current and Future Embryo Research

Embryonic stem cell research has made great strides in recent years, and religious leaders have done their best to keep pace with developments in the lab. Just last month, the Vatican condemned such research in a much anticipated bioethics document. The release of the 35-page document is the latest religious text to address two central questions in this field of study: when does the embryo go from being essentially an "object" to a person, and what brings about this transformation?

Given the impossibility of answering these questions with any kind of scientific objectivity, it's not surprising that people reach very different conclusions on the basis of their personal morals and religious beliefs.

It was to air these divergent beliefs, rather than to find any kind of consensus, that the Progress Educational Trust, a UK nonprofit, organized a one-day conference on the ethics of embryo research. The conference, entitled "Is he Embryo Sacrosanct? Multi-Faith Perspectives", was held in London in November and brought together representatives of all the major world religions, as well as several scientists and a few people of a more secular bent.

Although the discussion covered numerous aspects of embryo research and reproductive technology—including in vitro fertilization and preimplantation genetic diagnosis—the central focus was on human embryonic stem cells.

Unlike adult stem cells, ESCs can not only divide indefinitely but also transform into a wide range of cell types. As such, scientists are keen to investigate the ability of ESCs to help treat numerous diseases caused by large scale cell loss, including Alzheimer's disease, Parkinson's disease and diabetes. But they are being held back by the fact that ESCs can currently only be obtained from a five-day-old embryo, known as a blastocyst, in a process that involves its destruction.

Even though these are mainly excess embryos produced during fertility treatment, many people are unhappy about this willful destruction of embryos—

and their level of objection is often determined by their religious beliefs.

Differentiating Views

Most of the religions represented at the conference don't automatically grant an embryo the same rights as a person. Instead, they generally deem its transformation to personhood to occur at some point during pregnancy, often when the embryo is thought to attain a soul (known as ensoulment). This precise point not only differs between different religions but also between different denominations of the same religion.

Despite this, most religions still grant early embryos a degree of protection. Under Jewish law, an embryo is regarded as containing life in potential and should therefore be treated with the utmost care and attention. For a Muslim, aborting an embryo after ensoulment, which is deemed to occur at some point between 40 and 120 days after conception, is considered murder, according to representatives of this faith at the London meeting.

Offering a Christian perspective, Lee Rayfield, Anglican Bishop of Swindon and a member of the UK government's Gene Therapy Advisory Committee, made the distinction between the gradualist and absolutist positions. The gradualist position is held by the mainstream Church of England and maintains that an embryo younger than 14 days cannot be considered a person, whereas the absolutist position maintains than an embryo is a person from the moment of conception.

Such an absolutist position is held by the mainstream Roman Catholic Church, which maintains that the human embryo is morally inviolable and that it is a sin to destroy it. This is despite that fact that the Catholic Church has never officially defined at what point ensoulment takes place.

"What has been constant in the Catholic tradition [...] is the moral attitude of respect for human life from conception," says David Jones, professor of bioethics at St. Mary's University College, London.

But John Harris, professor of bioethics at the University of Manchester, counters that during natural reproduction embryos are also lost: "the willful creation and sacrifice of embryos is an inescapable and inevitable part of all reproduction." At the meeting Harris said that "everybody sitting in this room is here over the dead bodies of between three and five siblings that had to die in order that we could be born."

These kinds of debates are likely to become even more complicated and

impassioned as ESC technology advances. Since 2006, a number of research groups have reported producing pluripotent ESC-like cells by reprogramming adult skin cells from mice, humans and, most recently, monkeys.

On the face of it, this development should be welcomed by those opposed to embryo research, as it offers a way to obtain ESCs without using embryos. Religious experts at the recent London meeting said, however, that new ethical questions would arise if scientists find a way to reprogram adult cells to become totipotent stem cells, with the ability to develop into a fully functioning embryo.

(Adapted from *Nature Medicine*, 2009(4), written by Jon Evans)

Notes

- **embryonic stem cells** (ESCs) 胚胎干细胞，是从胚泡（早期胚胎阶段）未分化的内部细胞团中得到的干细胞。它们可以发育成为身体细胞类型中的任何一种。相关研究阶段仍在起步阶段，主要是对动物（如老鼠、牛或是羊等）的胚胎干细胞研究。
- **Progress Educational Trust** 进步教育信托基金，英国的一个非营利组织。
- **Alzheimer's disease**（AD）阿尔茨海默氏病，是一种起病隐匿的、进行性发展的神经系统退行性疾病。临床上以记忆障碍、失语、失用、失认、视空间技能损害、执行功能障碍以及人格和行为改变等全面性痴呆表现为特征，病因迄今未明。
- **Parkinson's disease** 帕金森病，指各种原因（脑血管病、脑动脉硬化、感染、中毒、外伤、药物以及遗传变性等）造成的以运动迟缓为主的一组临床症候群，主要表现为震颤、肌僵直、运动迟缓和姿势不稳等。
- **Roman Catholic Church** 罗马天主教会

New Words

embryo ['embrɪəʊ]
n. a minute rudimentary plant contained within a seed or an archegonium 胚，胚胎

embryonic [ˌembrɪ'ɒnɪk]
adj. of an organism prior to birth or hatching 胚芽的，胎儿的

bioethics [baɪəʊ'eθɪks]
n. the branch of ethics that studies moral values in the biomedical sciences 生物伦理学

divergent [daɪ'vɜːdʒənt]
adj. diverging from another or from a standard 有分歧的，叉开的

secular ['sekjʊlə]
adj. characteristic of or devoted to the temporal world as opposed to the spiritual world 现世的，俗界的

bent [bent]
n. a natural ability to do something or a natural interest in something 爱好，癖好

in vitro [ɪn 'viːtrəʊ]
adj. extra-organismal; in the test tube 体外的，试管的

fertilization [ˌfɜːtɪlaɪ'zeɪʃən]
n. creation by the physical union of male and female gametes; of sperm and ova in an animal or pollen and ovule in a plant 受精

preimplantation [priːˌɪmplæn'teɪʃən]
adj. in prior of plantation（子宫中）胚胎植入前的

blastocyst ['blæstəsɪst]
n. the blastula of mammals 胚泡，胚囊

willful ['wɪlfʊl]
adj. done by design 故意的

differentiate [ˌdɪfə'renʃɪeɪt]
vt. to mark as different 区分，使差异

personhood ['pəːsənhud]
n. being a person 做人，人格

ensoulment [in'səulmənt]
n. being given the soul to 赋予灵魂

denomination [dɪˌnɒmɪ'neɪʃən]
n. a group of religious congregations having its own organization and a distinctive faith 宗派，教派

abort [ə'bɔːt]
vt. to terminate a pregnancy by undergoing an abortion 使流产，使夭折

conception [kən'sepʃən]
n. the act of becoming pregnant 受精

gradualist ['grædʒuəːˌlɪst]
n. supporter of, believe in gradual change, reform 渐进主义者

absolutist ['æbsəlʊtɪst]
n. one who advocates absolutism 专制主义者，绝对论者

inviolable [ɪn'vaɪələbl]
adj. immune to attack; incapable of being tampered with 不可侵犯的

pluripotent [plʊə'rɪpətənt]
adj. capable of differentiating into different types of body cell 多能（性）的

totipotent [təʊ'tɪpətənt]
adj. (of an animal cell) capable of differentiation and so forming a new individual, tissue, organ, etc（细胞）全能的

Phrases and Expressions

keep pace with 赶上，跟上
hold back 控制，阻碍

Exercises

Questions 14—18

Do the following statements agree with the information given in the passage? In brackets ***14—18****, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

14. (　　) The Vatican released a bioethical document in favor of embryonic cell research last month.

15. (　　) The one-day conference organized by the Progress Educational Trust focused on the discussion about human embryonic stem cells.

16. (　　) People's level of objection to the willful destruction of embryos is usually determined by their religious belief.

17. (　　) Under Jewish law, aborting an embryo after ensoulment is regarded as murder.

18. (　　) The mainstream roman Catholic Church hold the opinion that it is a sin to destroy human embryo.

Questions 19—23

Choose the correct letter, ***A***, ***B***, ***C***, *or* ***D***. *Write the correct letter in blanks* ***19—23***.

19. The purpose of the conference organized by the Progress Educational Trust was ________.

A to reach agreement of any kind
B to learn from each other

C to express different belief

D to enjoy oneself

20. The following diseases are caused by large scale of cell loss EXCEPT ____________.

A Alzheimer's disease

B Parkinson's disease

C lung cancer

D diabetes

21. The precise point where an embryo is thought to transform into a person differs ____________.

A between different religions

B between different countries

C between different schools of the same religion

D both A and C

22. When can an embryo be regarded as a person according to the absolutist position?

A An embryo younger than 14 days can not be considered a person.

B An embryo older than 14 days can not be considered a person.

C An embryo is not a person at all.

D An embryo is a person from the moment of pregnancy.

23. John Harris maintains that ____________.

A destruction of embryo is an unavoidable part of all reproduction.

B everyone is sitting on the dead bodies.

C during natural reproduction embryos are also lost.

D we killed our siblings.

19. ____________ 20. ____________ 21. ____________ 22. ____________ 23. ____________

Questions 24—26

Translate the sentences from the passage into Chinese.

24. Given the impossibility of answering these questions with any kind of scientific objectivity, it's not surprising that people reach very different conclusions on the basis of their personal morals and religious beliefs.

____

____

25. Most of the religions represented at the conference don't automatically grant an embryo the same rights as a person.

26. These kinds of debates are likely to become even more complicated and impassioned as ESC technology advances.

Reading Passage 3

Solving the Mystery of Owls' Head-turning Abilities

This barred owl shares an adaptation with other owl species that allows it to rotate its head 270 degrees without damaging blood vessels in the neck.

Ever wonder how owls can turn their heads almost all the way around?

They have a complex, adaptive network of protective blood vessels that make the structures in our necks look puny—a network that researchers have now dissected, mapped and illustrated for the first time.

"Until now, brain imaging specialists like me who deal with human injuries caused by trauma to arteries in the head and neck have always been puzzled as to why rapid, twisting head movements did not leave thousands of owls lying dead on the forest floor from stroke," said Dr. Philippe Gailloud, an interventional neuroradiologist at Johns Hopkins and a senior researcher on the study, in a statement. A poster depicting these findings won first place in the 2012 International Science and Engineering Visualization Challenge, the journal Science announced yesterday.

The carotid and vertebral arteries in the neck of most animals, including owls and humans, are delicate and fragile structures. They're highly susceptible to minor tears and stretches of vessel linings. In humans, such injuries can be common: whiplash sustained in a car accident, a back-and-forth jarring roller coaster ride or even a chiropractic maneuver gone wrong. But they're also dangerous. Blood vessel tears caused by sudden twisting motions produce clots that can break off, sometimes causing an embolism or stroke that could prove fatal.

Owls, on the other hand, can rotate their necks up to 270 degrees in either direction without damaging the vessels running below their heads, and they can do it without cutting off blood supply to their brains.

Using medical illustrations, CT scans and angiography, which produces X-ray images of the inside of blood vessels, researchers studied the bone structure and vascular structure in the heads and necks of a dozen snowy, barred and great horned owls after their deaths from natural causes. All three species are native to the Americas, their habitats stretching from Tierra del Fuego, the southernmost tip of the South American mainland, to the Arctic tundra of Alaska and Canada.

When researchers injected dye into the owls' arteries to mimic blood flow and then manually turned the birds' heads, they saw mechanisms at play that contrasted greatly with humans' head-turning ability. Blood vessels at the base of the owls' heads, just below the jawbone, kept expanding as more of the dye flowed in. Eventually, the fluid pooled into tiny reservoirs. Our arteries tend to get smaller during head rotations and don't balloon in the same way.

Dye injected into deceased owls' blood vessels pools in tiny reservoirs as their heads are rotated manually, a feature that allows for uninterrupted blood flow to the brain.

Researchers believe this feature is crucial to support the top-heavy winged creatures. While they twist their heads back and forth, the owls' reservoirs allow the birds to pool blood to sustain the function of their eyes and brain, which are both relatively large compared to the size of their heads. This interconnected vascular network helps minimize interruption of blood flow.

But these silent hunters' head-on-a-swivel ability continued to be more complex, researchers found. In owls' necks, one of the major arteries feeding the brain passes through bony holes in the birds' vertebrae. These hollow cavities, known as the transverse foramina, were ten times bigger in diameter than the artery passing through it. The researchers say the roomy extra space creates multiple air pockets that cushion the artery and allow it to travel safely during twisting motions.

"In humans, the vertebral artery really hugs the hollow cavities in the neck. But this is not the case in owls, whose structures are specially adapted to allow for greater arterial flexibility and movement," said lead researcher Fabian de Kok-Mercado in the statement. De Kok-Mercado is a medical illustrator at Howard Hughes Medical Institute in Maryland.

This adaptation appeared in 12 of the 14 vertebrae in the owls' necks. The vertebral arteries entered their necks higher up than in other birds, introduced at the 12th vertebrae (when counted from the top) instead of the 14th, which gives the vessels more slack and room to breathe. Small vessel connections

between the carotid and vertebral arteries, called anastomoses, let blood flow uninterrupted to the brain, even when owls' necks were contorted into the most extreme twists and turns.

"Our in-depth study of owl anatomy resolves one of the many interesting neurovascular medical mysteries of how owls have adapted to handle extreme head rotations," de Kok-Mercado said.

Up next for the team is studying hawk anatomy to find out if other bird species possess owls' adaptive features for looking far left and right.

(Adapted from http://www.smithsonianmag.com/science-nature/solving-the-mystery-of-owls-head-turning-abilities-9561557/, written by Marina Koren)

Notes

- **neuroradiologist** 神经系放射学家
- **angiography** 血管造影术，是一种介入检测方法，将显影剂注入血管里，因为 X 光无法穿透显影剂，血管造影正是利用这一特性，通过显影剂在 X 光下所显示的影像来诊断血管病变的。
- **Howard Hughes Medical Institute** 霍华德·休斯医学研究所，是美国一个非营利性医学研究所。

New Words

puny ['pju:nɪ]
adj. inferior in strength or significance 微不足道的，弱小的，微弱的

dissect [dɪ'sekt]
vt. to make a mathematical, chemical, or grammatical analysis of 仔细分析

artery ['ɑ:tərɪ]
n. a blood vessel that carries blood from the heart to the body 动脉

carotid [kə'rɒtɪd]
n.& adj. of, situated near, or involving a carotid artery 颈动脉（的）

vertebral ['vɜ:tɪbrəl]
adj. of or relating to or constituting vertebrae 椎骨的，脊椎的

susceptible [sə'septɪbl]
adj. yielding readily to or capable of 可以接受或允许的

whiplash ['wɪplæʃ]
n. an injury to the neck (the cervical vertebrae) resulting from rapid acceleration or

deceleration (as in an automobile accident) 过度屈伸受伤

chiropractic [ˌkaɪrəʊ'præktɪk]
n. a system of therapy which holds that disease results from a lack of normal nerve function and which employs manipulation and specific adjustment of body structures (as the spinal column) 脊椎推拿疗法，捏脊

maneuver [mə'nʊvə]
n. a clever or skillful action or movement 策略，谋略，花招

clot [klɒt]
n. a coagulated mass produced by clotting of blood 凝块，血块

embolism ['embəlɪzm]
n. the sudden obstruction of a blood vessel by an embolus 栓塞，栓子，血栓

vascular ['væskjʊlə]
adj. of, relating to, constituting, or affecting a tube or a system of tubes for the conveyance of a body fluid 脉管的，血管的，含有血管的

tundra ['tʌndrə]
n. a large area of flat land in northern parts of the world where there are no trees and the ground is always frozen（多数位于北极圈的）冻土带，苔原，冻原，寒漠

mimic ['mɪmɪk]
vt. to imitate (a person or manner), especially for satirical effect 模仿，模拟

jawbone ['dʒɔːbəʊn]
n. the bone in the lower jaw of a person or animal 下颌骨

swivel ['swɪvəl]
n. a coupling device which allows the attached object to turn friendly 旋转轴，旋转接头

vertebrae ['vəːtɪbriː]
n. one of the bony segments of the spinal column 椎骨，脊椎（vertebra 的名词复数）

cavity ['kævɪtɪ]
n. a sizeable hole 腔，洞

transverse [trænz'vɜːs]
adj. extending or lying across 横向的，横断的

foramina [fə'ræmɪnə]
n. a small opening, perforation, or orifice（尤指骨头中的）孔，小孔（foramen 的名词复数）

slack [slæk]
adj. not tense or taut 松弛的

anastomoses [əˌnæstə'məʊsɪs]
n. a natural connection between two tubular structures, such as blood vessels 吻合，结合（anastomosis 的名词复数）

contort [kən'tɔːt]
vi. & *vt.* to move into an unnatural and unattractive shape or position 扭曲，扭弯

anatomy [ə'nætəmɪ]
n. the study of the structure of the bodies of people or animals 解剖，（生物体的）解剖结构

neurovascular [ˌnjʊərəʊ'væskjʊlə]
adj. of, relating to, or involving both nerves and blood vessels 神经与血管的

Exercises

Questions 27—31

*Do the following statements agree with the information given in the passage? In brackets **27—31**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

27. (   ) The carotid and vertebral arteries in the neck of owl and human can be easily hurt by even small tears.

28. (   ) Blood vessel tears caused by sudden twists and turns can be fatal.

29. (   ) Snowy, barred and great horned owls are native to the Americas.

30. (   ) Our arteries in the head tend to get bigger when we are turning the head.

31. (   ) Considering the size of their heads, owls' eye and brain are both relatively big.

Questions 32—36

*Complete the sentences below. Choose **NO MORE THAN TWO WORDS** from the passage for each answer.*

32. Brain imaging specialist can not understand why rapid, twisting __________ did not kill the owls.

33. Owls can turn their necks up to 270 degrees without cutting off __________ to their brains.

34. __________ produces X-ray images of the interior of blood vessels.

35. Owls' blood in the vessels pools in tiny reservoirs as they turn their head, which allow for continuous __________ flow to the brain.

36. __________ let blood flow uninterrupted to the brain, even if owls' necks rotate to the extreme.

Questions 37—39

Translate the sentences from the passage into Chinese.

37. They have a complex, adaptive network of protective blood vessels that make the structures in our necks look puny—a network that researchers have now dissected, mapped and illustrated for the first time.

____

____

38. When researchers injected dye into the owls' arteries to mimic blood flow and then manually turned the birds' heads, they saw mechanisms at play that contrasted greatly with humans' head-turning ability.

____

____

39. While they twist their heads back and forth, the owls' reservoirs allow the birds to pool blood to sustain the function of their eyes and brain, which are both relatively large compared to the size of their heads.

____

____

Unit 16

Section A

Reading Passage 1

Ancient Rituals on the Atlantic Coast

It is a gentle clicking, tapping, scraping concert on the upper reaches of a beach and in the long grass of a marsh. Only a soft sound, like muffled castanets, but it speaks of thousands—thousands of years, thousands of horseshoe crabs and thousands of birds.

As has occurred for aeons, every spring on the New Jersey Shore and along the Delaware Bay, hundreds of thousands of horseshoe crabs emerge from the depths of the ocean to mate. The large females, sometimes attended by as many as four smaller males, walk and are washed onto the beach with the full-moon and other spring high tides. They dig holes at the high-water mark and lay their clusters of tiny olive-colored eggs. The males then fertilize them. As the tide ebbs, the crabs are swept back to sea.

This annual coming of the carapaces can be seen and heard at night, by the light of the moon, or during the day, when shorebirds raucously feed on the wealth of green protein. More than a million birds traveling from South and Central America on their way to the Arctic Circle stop to gorge themselves on horseshoe crab eggs. Sanderlings, ruddy turnstones, semipalmated sandpipers, dunlins and more than half the world's population of red knots are among the species that double their weight eating the nutritious eggs. According to the New Jersey Division of Fish and Wildlife, the birds—some of which will travel 11,000 miles in total—eat more than 300 tons of eggs during their stay. It is all over in June. The full moon comes again, and the tides wash out the horseshoe crab larvae that have newly hatched after incubating in the sun for a month or so. The birds continue their journey north.

There are many places along the Delaware Bay and the New Jersey shore to see the rising tide of horseshoe crabs and their avian attendants. Several of the side

roads off the main routes at the southern end of New Jersey lead directly to good viewing spots: Reed's Beach, Thompson's Beach, Hand's Landing and Sunray Beach among them. Visitors have only to be careful of the piping plover nesting grounds. But there are walkways at some of the sites, and naturalists are stationed at certain points to answer questions. For those who want a more formal visit, several conservation groups organize tours.

Last spring there was much to see, even a day or so after the highest tide. In some of the inlets of the bay, dozens of terrapins poked their heads out of the water as if watching the horseshoe crabs shuffle on the sand, and the herring gulls and black-backed gulls chorused as they stalked the beach, looking for the golf ball-size clusters of crab eggs. In a nearby marsh, hundreds of crabs could be seen stranded in the eelgrass beds. Some were not lucky enough to make the ebb tide; others were trying to turn themselves over with their long spiked tail, or telson, which exists for that purpose.

The horseshoe crabs, Limulus Polyphemus, can be found at various points from Mexico to Maine, but the largest population resides around the New Jersey shore. In 2001 the National Oceanic and Atmospheric Administration banned fishing for the crabs in a part of Delaware Bay because of concern that their numbers were dwindling dramatically. Commercial fishermen have been harvesting the crabs—which can bring as much as $1 apiece—to sell as bait for lucrative eel and conch fisheries in other countries. Although there are no good data on the extent of the population—or how it has changed over the past few decades—anecdotal reports suggest that there are fewer crabs coming in to nest. That perception, coupled with a report from some wildlife groups that the population of red knots was down 33 percent, spurred protection. Other states have reduced catches as well.

Horseshoe crabs are still taken for medical research, however. Their blood, which turns blue when exposed to the air, coagulates around certain forms of bacteria, those that are gram-negative, and as a result, the blood is important for medical diagnoses. Horseshoe crabs have been around for about 350 million years—they were the contemporaries of dinosaurs—and for that reason they offer insight into early bacteria and immune responses. They are not, in fact, crabs at all but are more closely related to scorpions and spiders. A wonderful book from 1987, The Year of the Crab: Marine Animals in Modern Medicine, by William Sargent, describes the horseshoe crab's importance to various fields of research.

To see this amazing spectacle of ancient creatures hauling themselves up on beaches, take the Garden State Parkway toward Cape May, keeping an eye out for Route 9. Take it south to Route 83; follow 83 east until it hits Route 47 South,

which runs along the Delaware Bay side of the peninsula. Look on your road map for the beaches mentioned above or for Norbury's Landing Road and Kimble's Beach Road. Make sure you go on the full or new moon tide.

For information about guided tours and other beaches where you can view the horseshoe crabs and the birds, contact these organizations: the American Littoral Society, 732-291-0055; the Nature Conservancy, 609-861-0600; the Cape May Bird Observatory, 609-861-0700, which is run by the New Jersey Audubon Society; and the New Jersey Division of Fish and Wildlife, 609-292-9400 and www.njfishandwildlife.com.

If you are interested in learning more about the region, its history and its many creatures, read Bruce Stutz's Natural Lives, Modern Times: People and Places of the Delaware River (1992). Marguerite Holloway is a contributing editor for Scientific American.

(Adapted from Scientific American, March 2002, written by Marguerite Holloway)

Notes

- **Delaware Bay** 德拉瓦湾，美国东岸北大西洋海湾，为新泽西州和德拉瓦州界的一部分。
- **National Oceanic and Atmospheric Administration** (NOAA) 国家海洋和大气管理局，隶属于美国商务部的科技部门，主要关注地球的大气和海洋变化，为美国国家军队和民众提供海洋大气信息资源及进行环境管理保护。
- **Nature Conservancy** (TNC) 大自然保护协会，是从事生态环境保护的国际民间组织。由于坚持采取合作而非对抗性的策略，以及用科学的原理和方法来指导保护行动，经过 50 余年的不懈努力，协会已跻身美国十大慈善机构行列，位居全球生态环境保护非营利民间组织前茅。
- **New Jersey Audubon Society** 新泽西奥杜邦协会，是美国新泽西州的一个环境保护组织。

New Words

muffle ['mʌfl]
vt. to wrap up in thick clothing, cloth, etc., especially for warmth 裹住，围住，捂住

castanet [kæstə'net]
n. a percussion instrument（用硬木或象牙制成的）响板

aeon ['i:ən]
n. a period of one thousand million years; an immeasurably long period of time 极长（而无法计算）的时期，万古

ebb [eb]
n. the process in which the sea level on a coast becomes lower 退潮，落潮

sanderling ['sændəlɪŋ]
n. small sandpiper that breeds in the Arctic and migrates southward along sandy coasts in most of world 三趾滨鹬

ruddy ['rʌdɪ]
adj. red and looking healthy 红润的，血色好的

turnstone ['təːnstəʊn]
n. migratory shorebirds of the plover family that turn over stones in searching for food 翻石鹬（性喜翻石觅食）

semipalmate ['semɪ'pælmeɪt]
adj. (of the feet of some birds) having the front three toes partly webbed（足）具半蹼的

sandpiper ['sændpaɪpə]
n. any of numerous usually small wading birds having a slender bill and piping call 矶鹞，鹬

incubate ['ɪŋkjubeɪt]
vi. & *vt.* to develop under favorable conditions, such as germs and bacteria, sit on (eggs) 孵（卵）

shuffle ['ʃʌfl]
v. to walk slowly and noisily without lifting one's feet 曳脚走，拖着脚移动

telson ['telsən]
n. the terminal segment of the body of an arthropod or segmented worm（节肢或甲壳动物的）尾节，毒刺

dwindle ['dwɪndl]
vi. to become gradually less or smaller over a period of time until almost nothing remains 减少，变小

apiece [ə'piːs]
adv. each or for each one 每个，每件，每人，各自地

coagulate [kəʊ'ægjʊleɪt]
vi. & *vt.* to become thick and solid 凝固，使结块，使变稠

gram-negative [græm 'negətɪv]
adj. not holding the purple dye when stained by Gram's stain, used chiefly of bacteria 革兰氏阴性的

Text Analysis

The passage introduces a natural miracle on the New Jersey Shore and along the Delaware Bay, where hundreds of thousands of horseshoe crabs emerge from the depth of ocean to mate and lay their eggs on the beach.

The essay follows the pattern of a tourism introduction and can be divided into parts.

The First Part is made up of the first 3 paragraphs, picturing a significant miracle that there are thousands of horseshoe crabs and thousands of shorebirds come to the beach every spring. Paragraph 1 shows an overall natural picture before us. Paragraph 2 describes a picture on the process of horseshoe crabs' birth-giving. Paragraph 3 tells us the natural cruelty that over 300 tons of the eggs are gorged by more than a million shorebirds annually.

The Second Part consists of Paragraph 4 and Paragraph 5. The writer informs us of different places and different ways to have a good view on the natural scenery in Paragraph 4. In paragraph 5 the writer employs an example to describe this miracle last spring.

The Third Part covers Paragraph 6 and Paragraph 7. In this part the writer first introduces the economic and medical values of horseshoe crabs and the National Oceanic and Atmospheric Administration's effort to protect horseshoe crabs from reducing.

The Fourth Part consists of the rest paragraphs from Paragraph 8 to Paragraph 10. The Writer further tells us more information on this amazing natural scenery.

Exercises

Questions 1—5

*Do the following statements agree with the information given in the passage? In brackets **1—5**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1. ( ) The suffering that horseshoe crab eggs are the prey of birds lasts till June.
2. ( ) The largest population of horseshoe crabs can be found along the Delaware Bay and the New Jersey shore.
3. ( ) Herring gulls and horseshoe crab eggs coexist peacefully on the beach.
4. ( ) Data from crab protection groups shows that the population of horseshoe crabs

was down 43 percent annually.

5. (   ) Visitors can be organized to have a good view on the rising tide of horseshoe crabs and their avian attendants.

Questions 6—15

Complete the summary using the list of words below. Write the correct letter, ***A—O****, in blanks* ***6—15****.*

List of Words

A eaten	**B** walked	**C** full-size	**D** gorge	**E** lay
F traveling	**G** washed	**H** attendants	**I** viewing	**J** full-moon
K attended	**L** stay	**M** holes	**N** ebbing	**O** fertilize

Every spring, hundreds of thousands of female and male horseshoe crabs, with the 6____________ and high tides, emerge from the ocean and are 7____________ onto the beach to mate. The females 8____________ their clusters of tiny eggs into the 9____________ they prepared together, then the males 10____________ them. Finally, the crabs return to the ocean with the 11____________ of tides.

Unfortunately, the egg-laying are usually 12____________ by as many as more than one million 13____________ birds from South and Central America every year. They stop on their way to the Arctic Circle to 14____________ on the eggs. It is estimated more than 300 tons of eggs are consumed during their 15____________ annually. Such feeding lasts till June.

Questions 16—18

Translate the sentences from the passage into Chinese.

16. Although there are no good data on the extent of the population—or how it has changed over the past few decades—anecdotal reports suggest that there are fewer crabs coming in to nest.

____

____

17. Their blood, which turns blue when exposed to the air, coagulates around certain forms of bacteria, those that are gram-negative, and as a result, the blood is important for medical diagnoses.

____

____

18. To see this amazing spectacle of ancient creatures hauling themselves up on beaches, take

the Garden State Parkway toward Cape May, keeping an eye out for Route 9.

Question 19

*Choose the correct letter, **A**, **B**, **C** or **D**. Write the correct letter in blank **19**.*

19. Which of the following is not mentioned in the passage?

A The New Jersey shore is the best place to view the rising tide of horseshoe crabs.

B Horseshoe crabs can be used for medical research.

C Bruce Stutz's Natural Lives can provide more information on these beaches' history and creatures.

D Telson, the tail, can help horseshoe crabs roll over.

19. ____________

Section B

Reading Passage 2

The Scoop on Eating Dirt

A In the fall of 2009 a group of biology students at Tufts University sat down together and ate some dirt. They ground up small clay tablets and swallowed the powder to find out, firsthand, what clay tastes like. This unusual taste test was part of a Darwinian medicine class taught by one of us (Starks). The students were studying the evolution of geophagia—the practice of eating dirt, especially claylike soils, which is something animals and people have been doing for millennia.

B Today it is clear that geophagia is even more widespread in the animal kingdom than previously thought. Investigators have observed geophagia in more than 200 species of animals, including parrots, deer, elephants, bats, rabbits, baboons, gorillas and chimpanzees. Geophagia is also well documented in humans, with records dating to at least the time of Greek physician Hippocrates (460 B.C.). The Mesopotamians and ancient Egyptians used clay medicinally: they plastered wounds with mud and ate dirt to treat

various ailments, especially of the gut. Some indigenous peoples in the Americas used dirt as a spice and prepared naturally bitter foods such as acorns and potatoes with a little clay to counteract the acerbic taste.

C A common explanation for why animals and people eat dirt is that soil contains minerals, such as calcium, sodium and iron, which support energy production and other vital biological processes. The fact that an animal's need for these minerals changes with the seasons, with age and with overall health may explain why geophagia is especially common when an animal's diet does not provide enough minerals or when the challenges of the environment demand extra energy. Mountain gorillas and African buffalo that live at high altitudes may, for example, ingest earth as a source of iron that promotes red blood cell development.

D Mineral acquisition does not fully explain geophagia, though. In an extensive review paper published in the 2011 *Quarterly Review of Biology*, Sera L. Young of Cornell University and her colleagues conclude that eating earth rarely adds significant amounts of minerals to one's diet and, in many cases, interferes with the absorption of digested food from the gut into the bloodstream, sometimes resulting in nutrient deficiency.

E If animals and people are not getting much in the way of dietary minerals from dirt, what is the benefit of geophagia? A second explanation—that eating dirt is often a form of detoxification—is gaining credence.

F The idea that, in most cases, eating dirt is probably a way to get rid of toxins could explain why people and animals so often prefer claylike soils to other kinds of earth. Negatively charged clay molecules easily bind to positively charged toxins in the stomach and gut—preventing those toxins from entering the bloodstream by ferrying them through the intestines and out of the body in feces. Detoxification might also explain why some indigenous peoples prepare meals of potatoes and acorns with clay—these foods are bitter because they contain small amounts of toxins.

G In the 1990s James Gilardi, executive director of the World Parrot Trust, found support for the detoxification hypothesis in one of the few experimental studies on geophagia. While observing a flock of Peruvian parrots foraging on a particular band of exposed soil along the Manu River, Gilardi noticed that the birds neglected nearby stretches of soil with far more minerals. He surmised that the parrots were not ingesting soil for minerals but rather to counteract toxic alkaloids in the seeds and unripe fruit that make up a large part of their diet. Toxins prevalent in plants (and

meats) often irritate the gut. To test this idea, Gilardi fed some parrots the toxic alkaloid quinidine with and without their preferred dirt and measured how much alkaloid made it into the birds' blood after the meal. Birds that did not consume the soil had higher levels of quinidine in their blood, whereas a side dish of dirt reduced quinidine levels in the blood by 60 percent. Researchers have shown the same benefit in chimpanzees and baboons that supplement their diets with clay.

H Further evidence of dirt detox comes from studies of bats. A 2011 study in *PloS ONE* asked whether Amazonian bats visit clay licks—cliff sides of exposed clay—for nutrition or detoxification. Christian Voigt of the Leibniz Institute for Zoo and Wildlife Research in Berlin and his colleagues captured bats of two different species: one that eats mostly fruit and one that eats mostly insects. If the bats were eating clay for minerals, Voigt predicted, he would find fewer fruit-eating bats at the clay licks because fruits have more dietary minerals than insects. But most of the bats he captured at the clay lick were fruit-eating bats—and many of them were pregnant or lactating. Voigt concluded that the pregnant fruit bats visited the clay licks to detox because they were eating twice as much to feed their babies, which meant twice the dose of plant toxins from unripe fruits, seeds and leaves.

I Like bats, pregnant women may also eat dirt for its detoxifying properties, in addition to using dirt as a supplemental source of minerals. The first trimester of pregnancy plagues many women with nausea and vomiting, and cross-cultural studies document geophagia early in pregnancies in response to morning sickness. Women in sub-Saharan nations and in the southern U.S. have reported that they consume clay to alleviate this discomfort. Some researchers have proposed that morning sickness purges the mother of toxins that might harm the fetus. Perhaps geophagia and morning sickness work together to protect the developing fetus. Because clay can bind bacteria and viruses, it may also protect both mother and fetus from food-borne pathogens such as *Escherichia coli* and *Vibrio cholerae*.

J Although the scientific community has only recently accumulated enough evidence to argue that geophagia is an adaptive behavior, people—and not just pregnant women—have used clay minerals as remedies for nausea, vomiting and diarrhea for thousands of years. In the age of modern medicine, pharmaceutical companies harnessed the binding properties of kaolin, a clay mineral, to produce Kaopectate, a drug that treats diarrhea and other digestive issues. Eventually the synthetic chemical bismuth subsalicylate—also the key ingredient in Pepto-Bismol—replaced kaolin, but the clay is still used today in other ways. Kaolin and smectite bind not

only harmful toxins but also pathogens. Ranchers use clay when preparing livestock feed to inhibit toxin transmission, and some researchers have proposed harnessing clay's pathogen-binding talents to purify water.

K Of course, ingesting dirt can also be poisonous. Along with minerals and detoxifying materials, you might unintentionally ingest bacteria, viruses, parasitic worms, and dangerous amounts of lead or arsenic. Because of these risks, modern dirt eaters should stick with safe commercial products that have been heated or otherwise sterilized—but they should not be stigmatized for their behavior. Taken as a whole, the evidence argues that geophagia, in many cases, is not a sign of mental illness. It is a specific defense that has evolved to combat toxins and, possibly, ease mineral deficiencies. Although you may not be thinking about geophagia when you take vitamins or seek comfort from a swig of Kaopectate, you are in fact participating in the age-old practice of eating dirt.

(Adapted from Scientific American, June 2012,
written by Philip T.B. Starks and Brittany L. Slabach)

Notes

- **Mesopotamian** 美索不达米亚，在伊拉克共和国境内，美索不达米亚在希腊语的意思是两河之间的土地。
- **Leibniz Institute for Zoo and Wildlife Research** 莱布尼茨动物园和野生动物研究所，在德国柏林。
- **Escherichia coli** 大肠杆菌
- **Vibrio cholerae** 霍乱弧菌
- **Kaopectate** 白陶土和果胶制剂，是一种止泻药。
- **Pepto-Bismol** 胃肠用铋
- **Quinidine** 奎纳定

New Words

scoop [sku:p]
n. a news report that is reported first by one news organization 独家新闻

geophagia [dʒi:əʊ'feɪgə]
n. eating earth or clay or chalk 食土癖

plaster ['plɑ:stə]
vt. to apply a heavy coat to 涂以灰泥，敷贴膏药

ailment ['eɪlmənt]
n. an often persistent bodily disorder or disease 疾病（尤指微恙）

indigenous [ɪn'dɪdʒɪnəs]
adj. originating where it is found 土生土长的，本地的

acorn ['eɪkɔ:n]
n. fruit of the oak tree, a smooth thin-walled nut in a woody cup-shaped base 橡子，栎实

counteract [kaʊntər'ækt]
vt. to act in opposition to 抵消，阻碍，中和

acerbic [ə'sɜ:bɪk]
adj. sour or bitter in taste 酸的，尖刻的

credence ['kri:dəns]
n. the mental attitude that something is believable and should be accepted as true 相信（传言）

toxin ['tɒksɪn]
n. a poisonous substance produced during the metabolism and growth of certain microorganisms and some higher plant and animal species 毒素，毒质

intestine [ɪn'testɪn]
n. the part of the alimentary canal between the stomach and the anus 肠

feces ['fi:si:z]
n. solid excretory product evacuated from the bowels 粪，屎，渣滓

toxic ['tɒksɪk]
adj. of or relating to or caused by a toxin or poison 有毒的，中毒的，因中毒引起的

alkaloid ['ælkəlɒɪd]
n. natural bases containing nitrogen found in plants 生物碱，植物碱基

irritate ['ɪrɪteɪt]
vt. to cause to itch or become sore 使疼痛，使发炎

detox ['di:tɒks]
vt. to treat for alcohol or drug dependence 使戒去毒瘾（或酒瘾）

lactate [læk'teɪt]
vi. to give suck to（指哺乳动物）分泌乳汁

detoxify [di:'tɒksɪfaɪ]
vt. to remove poison from; treat for alcohol or drug dependence 使解毒，使戒毒

trimester [traɪ'mestə]
n. a period of three months; especially one of the three three-month periods into which

human pregnancy is divided 三个月

purge [pɜːdʒ]
vt. to rid something of impure or undesireable elements 清除，（使）净化

fetus ['fiːtəs]
n. an unborn or unhatched vertebrate in the later stages of development showing the main recognizable features of the mature animal 胎，胎儿

pathogen ['pæθədʒən]
n. a specific causative agent (as a bacterium or virus) of disease 病菌，病原体

coli [kəʊlaɪ]
adj. of or relating to bacteria normally inhabiting the intestine or colon and especially to species of the genus Escherichia (as E. coli) 大肠（杆）菌的

cholera ['kɒlərə]
n. an acute intestinal infection caused by ingestion of contaminated water or food 霍乱

binding ['baɪndɪŋ]
adj. executed with proper legal authority 有约束力的，捆绑的

kaolin ['keɪəlɪn]
n. a fine usually white clay formed by the weathering of aluminous minerals (as feldspar) 高岭土，瓷土

bismuth ['bɪzməθ]
n. a heavy brittle diamagnetic trivalent metallic element (resembles arsenic and antimony chemically) 铋

subsalicylate [sʌbsə'lɪsəleɪt]
n. a basic salicylate (as bismuth subsalicylate) 碱式水杨酸盐

smectite ['smektait]
n. any of a group of clay minerals of which montmorillonite and saponite are members 蒙脱石，（去油垢）绿土，蒙皂石

livestock ['laɪvstɒk]
n. any animals kept for use or profit 家畜，牲畜

parasitic [pærə'sɪtɪk]
adj. relating to or caused by parasites 寄生的，由寄生虫引起的

arsenic ['ɑːsənɪk]
n. a very poisonous metallic element that has three allotropic forms 砷，三氧化二砷，砒霜

sterilize ['sterəlaɪz]
vt. to make free from bacteria 消毒，使无菌

stigmatize ['stɪgmətaɪz]
vt. to accuse or condemn or openly or formally or brand as disgraceful 使受耻辱，指责，污辱

swig [swɪg]
n. a large and hurried swallow 痛饮，大喝

Phrases and Expressions

grind up	磨成粉末
gain credence	变得更为可信
stick with	继续支持

Exercises

Questions 20—25

*The passage has eleven paragraphs, **A–K**. Match each topic listed below with the paragraph(s) in which it is mentioned.*
*Write the correct letter, **A–K**, in blanks **20–25**.*

20. The risks of eating dirt
21. A prevailing purpose for geophagia: acquisition of minerals
22. Fetus-developing women eating dirt for getting rid of toxin
23. Evidence for dirt detox assumption of geophagia from birds
24. Support for detoxifying properties of dirt from two species of bats
25. The conclusion that dirt may disturb digestion

20. ________ 21. ________ 22. ________ 23. ________ 24. ________ 25. ________

Questions 26—30

*Answer the questions below. Choose **NO MORE THAN FIVE WORDS** from the passage for each answer.*

26. What research were the students doing at Tuffs University in the autumn of 2009?

____

27. How is the second explanation for the advantage of geophagia considered?

____

28. Why may African buffalo at high altitudes eat earth?

____

29. What does the scientific circle argue with the support of the adequate collection of evidence?

____

30. What kind of stigma may earth eaters probably be branded for their behavior?

____

Questions 31—33

Translate the sentences from the passage into Chinese.

31. The fact that an animal's need for these minerals changes with the seasons, with age and with overall health may explain why geophagia is especially common when an animal's diet does not provide enough minerals or when the challenges of the environment demand extra energy.

____

____

32. The idea that, in most cases, eating dirt is probably a way to get rid of toxins could explain why people and animals so often prefer claylike soils to other kinds of earth.

____

____

33. Voigt concluded that the pregnant fruit bats visited the clay licks to detox because they were eating twice as much to feed their babies, which meant twice the dose of plant toxins from unripe fruits, seeds and leaves.

____

____

Reading Passage 3

The Misery Goes On

Mrs. Schiavo is in a persistent vegetative state: her cerebral cortex is destroyed. She must be fed through a gastric tube, but her condition is stable and she is not on life-supporting drugs. Her parents, Bob and Mary Schindler are willing to take over care for her from her husband, Michael, who is living with another woman. Why should Mrs. Schiavo not be handed over to her loving parents?

The answer from the Florida courts is not that her medical condition makes her death so inevitable that it would be merciful to speed it up. Nor is the answer that her death would be convenient to the husband who is her legal guardian (if that were so, husbands would be free to kill their wives). Nor is it, as Professor Robert George, a member of George Bush's Council on Bioethics, has suggested, that America has adopted a standard of "life unworthy of life" which means Mrs. Schiavo can be legitimately killed (he used the Nazi term, *Lebensunwertesleben*).

The main two reasons are that the courts, unlike Mrs. Schiavo's parents, are satisfied that she will never recover, and, especially, that Mrs. Schiavo herself said that she did not want to be kept alive in that condition. How do we know that? We don't, for certain. She left no "living will". The information comes from her husband: he said in court testimony that before her accident 15 years ago, in specific conversations with himself and his relatives after family funerals, Mrs. Schiavo said she would not want to be kept artificially alive.

This is hearsay from a witness whose subsequent life has raised doubts about his impartiality. But the Florida courts admitted it as evidence and have repeatedly deemed it a convincing guide to Mrs. Schiavo's intentions. Last week, her feeding tube was removed and it has stayed out despite Congress reconvening over the weekend to pass a law giving her parents the right to appeal to the federal courts. A federal district judge and a federal appeals court, thinking the Schindlers have little chance of winning, have both refused to order the tube to be replaced. The Schindlers are battling on. But for the courts the only question is: why should her wishes not be carried out?

If the legal question is brutally simple, the politics is not. Mrs. Schiavo's case has torn apart everything it touches. What began as a personal tragedy has rent asunder first her family, then her state, and is now tearing at the Congress and the nation at large. It has become the touchstone for hard questions: How do we treat the end of life? Who should make decisions about the last days of loved ones, if they cannot do so themselves? Who should police these new areas of bioethics?

In conservative lore, Schindler v Schiavo is becoming another Roe v Wade, a symbol of the unethical manipulation of life. The parents' spokesman, Randall Terry, is the founder of Operation Rescue, a group that led high-profile, sometimes violent, picketing of abortion clinics in the early 1990s. The National Right to Life Committee helped draft a bill in Congress that would have given patients like Mrs. Schiavo rights of appeal to federal courts. Two anti-abortion groups, Concerned Women for America and the Family Research

Council, helped to lobby congressmen.

These groups all think the battle to protect the end of life is the same as the one to protect life in the womb. In court testimony, the Schindlers went so far as to suggest that protecting life was more important than their daughter's wishes: they would have sought to keep her alive even if she had refused medical help.

In the case of abortion, the fervent belief of a minority has kept the issue going without majority support in the country. This time, two in three Americans think the courts were right to remove Mrs. Schiavo's feeding tube. Even more oppose Congress's intervention. These majorities cross boundaries of opinion. Self-described conservatives support the decision to remove the feeding tube. In an aging society, many Americans are either looking after an elderly parent or may soon do so. Personal experience may count for more than deep-seated belief.

And as with abortion, careful framing of issues—and in some cases outright slander—have dominated political debate. In a special midnight session of Congress, members rose to ask essentially, if we can save a woman's life, why shouldn't we?

Bill Frist, the leader of the Senate, said that he had reviewed video evidence of Mrs. Schiavo through medical eyes (he is a surgeon) and concluded that her doctors were wrong. She is not in a persistent vegetative state. Had he offered this medical opinion in court, he could have been sued. House Republicans accused Michael Schiavo of common-law bigamy. Their leader, Tom DeLay, spoke of "murder". National Review Online proposed that, since Mr. Schiavo is starving his wife to death, he should be charged with torture (her doctors insist she will feel no pain).

Given the hard questions involved in this case, one might perhaps have hoped Congress would have spoken with more restraint. But American democracy is more sensitive than most of grass-roots activism, so the charges that politicians were "responding to their conservative base" or that the process was "too political" are probably misplaced. The bigger question is whether Congress did the right thing.

Congress certainly could play a role in end-of-life debates. The Supreme Court has frequently said that political processes, rather than the courts, ought to set limits on people's actions in "life issues". Last week, Republicans in the lower house of the Florida legislature tried to set a limit when they approved a bill that would have required feeding people in persistent vegetative states unless they had left specific directions to the contrary (the bill failed in the

state Senate). By contrast Congress did not try to set up new limits this week. Instead, it voted to send the Schiavo case to federal court for review.

Congress has the power to do this. And there are some doubts over the Florida courts' proceedings. The Schindlers say they did not get a fair trial because their daughter was not separately represented (since Mr. Schiavo is her legal guardian, he represented her). The parents also argue that, because of his new family, Mr. Schiavo should no longer hare the rights of a competent spouse. The trouble is that the Schindler family's solution to the first problem—give Terri a court-appointed guardian—risks taking decisions about her fate out of the family altogether. And it is not clear pushing Mr. Schiavo aside would make any difference now: the courts, following Terri's wishes, would order the tube to be disconnected.

(Adapted from *The Economist*, March 26, 2005, anonymous)

Notes

- **National Right to Life Committee** (NRLC) 国家生存权力委员会，是美国最大、历史最长的反堕胎组织，在 50 个州有下属机构。
- **Family Research Council** (FRC) 家庭研究理事会，美国的一个保守基督教组织，总部在华盛顿特区。

New Words

vegetative ['vedʒɪtətɪv]
adj. relating to involuntary bodily functions 植物人的

cerebral ['serɪbrəl]
adj. of or relating to the cerebrum or brain 大脑的

gastric ['gæstrɪk]
adj. relating to or involving the stomach gastric ulcer 胃的，胃部的

testimony ['testɪmənɪ]
n. a solemn statement made under oath（法庭上证人的）证词

impartiality ['ɪmˌpɑːʃɪ'ælətɪ]
n. an inclination to weigh both views or opinions equally 公平，公正，不偏不倚

reconvene [ˌriːkən'viːn]
vt. to meet again after a break 重新集合，再聚会，再集会

asunder [ə'sʌndə]
adv. apart 分开地，分离地

fervent ['fɜːvənt]
adj. extremely hot; characterized by intense emotion 炽热的，强烈的，热诚的，热烈的

bigamy ['bɪgəmɪ]
n. the offense of marrying someone while you have a living spouse from whom no valid divorce has occurred 重婚，重婚罪

Exercises

Questions 34—38

*Do the following statements agree with the information given in the passage? In brackets **34—38**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

34. (　　) Euthanasia (安乐死) has existed in America.

35. (　　) Unlike the Schindlers, the courts agree that Mrs. Schiavo will never recover.

36. (　　) The Schindlers refuse the Florida courts' decision.

37. (　　) Majority of Americans support abortion.

38. (　　) The Florida Senate finally reaches an agreement on limits of feeding vegetative people.

Questions 39—42

*Look at the following statements and the list of people and groups below. Match each statement with the correct person or group. Write the correct letter, **A—E**, in blanks **39—42**.*

List of People and Groups

A Family Research Council
B Bill Frist
C The Schindlers
D National Review Online
E Mr. Schiavo

39. Mr. Schiavo should be sentenced to torment.

40. Protecting life outweighs one's last words.

41. Mrs. Schiavo was misdiagnosed to be a vegetative patient.

42. The feeding tube should be removed.

39. ________ 40. ________ 41. ________ 42. ________

Question 43

Choose the correct letter, ***A, B, C*** *or* ***D****. Write the correct letter in blank* ***43****.*

43. What is American's attitude towards the Florida courts' decision on the case?

A Objection.

B Approval.

C Most objection.

D Most approval.

43. ________

Unit 17

Section A

Reading Passage 1

Buildings That Breathe

At first glance, you might not suspect that the Philip Merrill Environmental Center in Annapolis, Maryland, is as Earth friendly as an old windmill. The headquarters of the Chesapeake Bay Foundation, it displays more wood construction than the typical large building these days. But to understand what the designers, SmithGroup, did to make it truly different, you would have to know that one-third of its energy comes from geothermal heat pumps that utilize the earth's warmth and photovoltaic building panels that convert sunlight into electricity. Or that rainfall collected on the roof can be channeled into huge holding tanks for reuse in irrigation. Or that its sun-screen overhangs are made from recycled pickle barrels. Whole platoons of enforcement lawyers for the Environmental Protection Agency could not be more ecologically effective than its waterless composting toilets, bamboo flooring and timber cut from sustainably harvested wood.

The Merrill Center epitomizes the new wave of "green architecture," a catchall term for design and construction practices that take into account a whole checklist of environmental goals. How a building is sited, how well it reuses its wastewater, how efficiently it is heated and cooled—those are all questions green architects examine closely. To answer them, they have access to a new generation of supplies that include nonpolluting paints, low-flow toilets and windows glazed to admit sunlight but reduce heat radiation. The Adam J. Lewis Center for Environmental Studies at Oberlin College even has a state-of-the-art disinfectant system that cleans toilet water for re-use. (No, not in drinking fountains.) But green design is not all about high tech. One simple idea: windows on high-rises that actually open. That facilitates natural air-ventilation systems, also known as breezes.

The thing about buildings is that they are the very thing nature is not. Ever since people moved out of caves, which were pretty much all natural if you didn't count the paintings on the walls, structures have been the prime markers of

human settlement, a process that often comes with unhappy consequences for the environment. John Denver's *Rocky Mountain High*—"More people, more scars upon the land"—is not a song you hear much at architecture conventions.

No one can deny that when it comes to the environment, buildings are right up there with automobiles as polluters. Homes, schools, office towers and shopping centers dirty their own little rivers of water every day. With their air-conditioning and heating systems, they waste large amounts of electrical and fossil-fuel power. Toxic ingredients leach from building materials and foul the air. Thirty years ago, only a few environmentally minded architects cared about such things. "Classic Modernism didn't even think about the environment," says James Wines, founder of SITE, a pioneering green-design firm. "The Modernists worshipped industrialism and industrial material because that was the future."

That began to change in the 1970s with that decade's oil shocks, which produced a short-lived vogue for alternate heating technologies. The simultaneous rise of environmentalism also inspired what you might call hobbit architecture, cottages crowned with listless greenery and the odd solar panel. Paolo Soleri's ecotopian settlement, Arcosanti, began to take shape in the Arizona desert. But it wasn't until the 1990s that green architecture gained a foothold in mainstream building. That was partly the result of a growing realization that "sustainable" buildings have lower long-term heating and cooling costs. States began offering tax incentives for construction that put less pressure on power grids or water supplies. Coming of age at the same time was a generation of architects who were knowledgeable about environmentally conscious construction materials and techniques.

Four years ago, the U.S. Green Building Council, an association of architects, builders and other green specialists, adopted the Leadership in Energy and Environmental Design (LEED) certification system, which sets out standards that a building must meet to qualify as environmentally friendly. The council estimates that today at least 3% of new building starts each year have some Earth-friendly features. "The growth of green building is driven partly by energy efficiency and other cost savings," says council president and CEO Christine Ervin, "but also by the need of businesses to attract the best employees. These buildings can make very attractive workplaces."

Some of them turn up in unlikely places. In Manhattan's Times Square, the 48-story headquarters of the Conde Nast publishing company produces nearly 10% of its electricity with photovoltaics and hydrogen-powered fuel cells. In what was once the derelict B&O railroad site on the riverfront in Pittsburgh, Pennsylvania, you now find the PNC Firstside Center, with many of the standard green features plus

eight electric-car recharging stations to encourage the use of energy-efficient cars.

Some of the most prominent names in architecture have turned green, at least for selected projects. The three-sided Commerzbank headquarters in Frankfurt, Germany, is a major work by a renowned British architect, Sir Norman Foster. At 53 stories, it was until recently the tallest building in Europe. It is also one of the leafiest. All around its triangular interior atrium are gardens in the sky, set at different elevations, so that no worker is more than a few floors away from a sizable patch of greenery. “Building allows us to explore nature in a different way,” says Jeremy Edmiston, of System Architects, who is conducting research on green-design principles for the Lindbergh Foundation. “We’re looking at ways to put parks into high-rise buildings.”

Natural air circulation is a preoccupation of green architecture. With the widespread adoption of air conditioning after World War II, the typical office building was constructed to be more airtight than a mummy’s tomb. Now designers are rediscovering principles of ventilation and air circulation familiar to builders of the 19th century. The Rocky Mountain Institute took part in an environmental upgrade of the White House and the vintage Executive Office Building nine years ago. “We discovered that the old office building was already designed with a natural ventilation system—a fairly brilliant one,” says William Browning, the institute’s senior consultant for green development. Parts of that system, which once linked chimneys and other air passages, are now back in operation.

Not everything green is rosy. To provide sunlight that reduces reliance on electrical lighting, environmentally conscious designers tend to favor open-plan workplaces over offices with doors that close. That can be good for nature, less good for quiet and privacy. And big suburban residential developers are not piling in yet. Reduced long-term energy costs, for instance, are not an important incentive to builders who plan to sell off the homes they build right away.

Some green architecture is literally green. Dwellings that nestle directly into the landscape like caves, with carpets of earth and grass rolling over them as roofing, were among the first and most thoroughgoing examples of green architecture in the 1970s. Buildings like those take their inspiration from such time-honored examples as Bronze Age settlements that were dug into the earth. But they operate on principles that can be adapted to modern midtown high-rises. For the past year, Chicago’s City Hall, a 1911 Classical Revival building, has been topped by a “green roof”—a 2,000-sqm garden that was planted as a climate-control

mechanism. Built from a blend of compost, mulch and spongelike materials that hold water more effectively than regular soil, the low-maintenance garden of 20,000 plantings is intended to reduce City Hall's air-conditioning and heating costs by as much as $6,000 each year.

In summer the garden helps keep the building cool by shielding it under a layer of moist material. In winter it insulates against cold. In both seasons, it reduces the storm-water runoff that occasionally overflows the Chicago sewers leading to Lake Michigan. Though the garden has yellowed a bit this summer, it still provides its cost-cutting benefits. Not incidentally, it also provides a habitat for birds, butterflies and grasshoppers. But not yet for people: the garden is closed to the public. Sometimes nature needs to work in peace.

(Adapted from *Time*, September 2, 2002, written by Richard Lacayo)

Notes

- **Philip Merrill Environmental Center** 菲利普美林环境中心，切萨皮克湾基金会的一个绿色建筑，在美国安纳波利斯。该建筑以美国的外交官、银行家和慈善家 Philip Merrill 命名，是第一个获得绿色建筑认证 (LEED)“白金奖”的建筑。
- **Annapolis** 安纳波利斯，在美国马里兰州。
- **Chesapeake Bay Foundation** 切萨皮克湾基金会
- ***Rocky Mountain High*** 是 John Denver 和 Mike Taylor 写的一首关于科罗拉多的歌曲。
- **hobbit** 穴居矮人，霍比特人，J. R. R. 托尔金的系列小说《指环王》中一种想象的种族，身材矮小，脚上多毛，类似人类。
- **Leadership in Energy and Environmental Design** (LEED) 绿色建筑认证奖，美国民间奖项，由非盈利组织美国绿色建筑协会于 2003 年开始运作，目前在世界各国的各类建筑环保评估、绿色建筑评估以及建筑可持续性评估标准中被认为是最完善、最有影响力的评估标准。如今它已经成为全球默认的主流绿色建筑评级体系，得到全球不同气候带国家的认可。
- **Conde Nast publishing company** 康得纳斯出版公司，一家 1908 年由康得·纳斯在美国创立、总部位于美国纽约市的国际期刊出版集团。旗下出版物众多，包括《纽约客》(*The New Yorker*)、《名利场》(*Vanity Fair*)、《诱惑》(*Allure*)、《时尚》(*Vogue*)、《GQ》、《现代新娘》(*Modern Bride*) 等知名杂志。
- **Commerzbank** 德国商业银行，1870 年成立，德国三大银行之一。
- **Rocky Mountain Institute** 落基山研究所，致力于可持续发展方面研究、宣传、咨询和演说，特别关注能源与资源有效利用方面的创新。

New Words

geothermal [dʒiːəʊ'θɜːməl]
adj. of or relating to the heat in the interior of the earth 地热的，地热（或地温）产生的

photovoltaic [fəʊtəʊvɒl'teɪk]
adj. producing a voltage when exposed to radiant energy (especially light) 光电池的

pickle ['pɪkəl]
n. vegetables (especially cucumbers) preserved in brine or vinegar 泡菜，腌制食品

platoon [plə'tuːn]
n. a military unit that is a subdivision of a company; usually has a headquarters and two or more squads（军队的）排，团，一群

composting ['kɒmpɒstɪŋ]
n. a mixture that consists largely of decayed organic matter and is used for fertilizing and conditioning land 堆制肥料

catchall ['kætʃɔːl]
n. an enclosure or receptacle for odds and ends 放各种各样物品的容器

state-of-the-art [ˌsteɪtɒvðɪ'ɑːt]
adj. the highest level of development at a particular time (especially the present time)（科技、机电等产品）最先进的，顶尖水准的

disinfectant [dɪsɪn'fektənt]
adj. preventing infection by inhibiting the growth or action of microorganisms 消毒的

ventilation [ˌventɪ'leɪʃən]
n. a mechanical system in a building that provides fresh air 通风设备，通风方法

leach [liːtʃ]
vi. & *vt.* to remove substances from by a percolating liquid 过滤

foul [faul]
vt. to make unclean 弄脏

listless ['lɪstlɪs]
adj. marked by low spirits; showing no enthusiasm 倦怠的，百无聊赖的，冷淡的

foothold ['fʊthəʊld]
n. an area in hostile territory that has been captured and is held awaiting further troops and supplies（在事业等方面可以进一步发展的）稳固位置，根据地

derelict ['derəlɪkt]
n.（a ship）abandoned on the high seas 遗弃物

riverfront ['rɪvəfrɒnt]
n. the land or area along a river（城镇的）河边地区

renowned [rɪ'naʊnd]
adj. widely known and esteemed 有名的，有声望的

atrium ['eɪtrɪəm]
n. the central area in a building; open to the sky（现代建筑物开阔的）中庭，天井

elevation [ˌelɪ'veɪʃən]
n. the event of something being raised upward; angular distance above the horizon (especially of a celestial object) 高处，高度

preoccupation [prɪˌɒkjʊ'peɪʃən]
n. the mental state of being preoccupied by something 全神贯注，入神

vintage ['vɪntɪdʒ]
n. a season's yield of wine from a vineyard 葡萄收获期，葡萄酿酒期

open-plan ['əupən'plæn]
adj. (of rooms or buildings) having large rooms with few dividing partitions（房屋或办公室的）开敞式平面布置

runoff ['rʌnɒf]
n. the occurrence of surplus liquid (as water) exceeding the limit or capacity 流走之物，溢流

sewer ['sjuːə]
n. a waste pipe that carries away sewage or surface water 阴沟，下水道

grasshopper ['grɑːshɒpə]
n. an insect with long back legs that jumps high into the air and makes a high, vibrating sound 蚱蜢，蝗虫

Phrases and Expressions

convert into	转变，折合
take into account	重视，考虑，顾及
access to	有权使用
take shape in	具体化，成形，体现
turn up	翻起，出现，（尤指失去后偶然）被发现
dig into	挖掘，调查

Text Analysis

Part one of the passage (Paragraphs 1 & 2) begins with an Earth friendly building—the Philip Merrill Environmental Center—which is green in energy, light, water collecting,

waterless toilets, and sustainably harvested building materials. This building is the typical example of "green architecture." To realize the environmental goals designers need not only the new supplies involving high-tech.

Part two (Paragraphs 3 & 4) discloses that building is a process that often comes with unhappy consequences for the environment and the Modernists focus primarily on the elements of the future.

Part three introduces a green trend in building and exemplifies green concept with many green building. A change was witnessed since the 1970s along with increasing environmentalism, meanwhile, a generation of architects was knowledgeable about environmentally conscious construction materials and techniques (Paragraph 5). LEED certification system was adopted which set out standards for green architecture (Paragraph 6). Green features can be found in some prominent names, such as the Manhattan's Times Square (Paragraph 7) and Commerzbank headquarters in Frankfurt (Paragraph 8), etc., and the environmentally conscious techniques had been employed in air circulation (Paragraph 9), lighting (Paragraph 10), location like caves (Paragraphs 11 & 12).

Exercises

Questions 1—5

Look at the following features and the list of green buildings below. Match each feature with the correct building.

*Write the correct letter, **A—D**, in blanks **1—5**.*

NB: You may use any letter more than once.

List of Green Buildings

A Philip Merrill Environmental Center in Annapolis

B headquarters of the Conde Nast publishing company

C Commerzbank headquarters in Frankfurt

D Chicago's City Hall

1. Using a kind of special soil that needs little care.
2. Some of its materials are made from waste materials.
3. People in the building can enjoy greenery conveniently.
4. Its plantings can control temperature in the building.
5. Part of its energy comes from the Earth and the Sun.

1. ________ 2. ________ 3. ________ 4. ________ 5. ________

Questions 6–10

*Do the following statements agree with the information given in the passage? In brackets **6–10**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

6. (　　) In the past, most architects have realized that buildings were the scars on Earth.
7. (　　) Buildings pollute the Earth by digging holes.
8. (　　) Since the oil-shock in 1970s, the green architecture has become the mainstream building.
9. (　　) Green buildings today adopt parts of the natural ventilation system that old buildings used.
10. (　　) People who work in open-plan workplaces may suffer from noise and an intrusion of privacy.

Questions 11–13

Translate the sentences from the passage into Chinese.

11. The Merrill Center epitomizes the new wave of "green architecture," a catchall term for design and construction practices that take into account a whole checklist of environmental goals.

____

____

12. Coming of age at the same time was a generation of architects who were knowledgeable about environmentally conscious construction materials and techniques.

____

____

13. With the widespread adoption of air conditioning after World War II, the typical office building was constructed to be more airtight than a mummy's tomb.

____

____

Section B

Reading Passage 2

Mars Shake and Bake

A tantalising whiff of carbon-based compounds has been picked up by NASA's Curiosity Mars rover. But it's still not clear whether the eagerly awaited results are revealing the true chemical nature of Mars or are instead the products of Earthly contaminants.

One of the goals of the NASA rover, which landed on the Red Planet on 6 August, is to search for signs that Mars might once have had the means to support life. One clue would be organics—carbon-containing compounds that are the building blocks of life as we know it. During Curiosity's first "meals" of Martian soil, baked inside the robot's ovens, carbon and hydrogen were found to have reacted with chlorine, creating organic molecules.

This taste of carbon is intriguing, but it is a far cry from recent feverish speculation that the rover had found definitive evidence for organic compounds on Mars.

"The rover has made this detection of simple organic compounds," says project scientist John Grotzinger of NASA's Jet Propulsion Laboratory in Pasadena, California. But crucially, the rover only detected them after cooking them up. The mystery now is: where did it find that key ingredient—carbon?

While the chlorine is almost certainly native, it is still unclear whether the carbon is Martian material or something from Earth that was trapped in the rover. Even if the carbon is from Mars, it may come from inorganic sources, such as carbonate rocks.

The result is only one of the intriguing chemical discoveries the rover has pulled from a wind-blown patch of sand at a site dubbed Rocknest, unveiled on 3 December at the American Geophysical Union (AGU) Fall Meeting in San Francisco.

Since it touched down in Gale crater, Curiosity has been firing up its science tools one by one. Star of the show at the AGU meeting was the sample Analysis at Mars (SAM) experiment, which can sniff the atmosphere and can analyse the gases given off when soil samples are heated to as much as 1100℃.

SAM was the final major instrument to come online. Excitement surrounding

the consistency of results emerging from multiple samples prompted Grotzinger to reveal—in a US radio interview on 20 November—that "this data is going to be one for the history books. It's looking really good."

So far, the results—and their delivery from the scientists—have been more nuanced. "These results are an unprecedented look at the chemical diversity in the area," said Michael Meyer, NASA's lead scientist for Mars exploration, based in Washington DC.

SAM has been processing scoops of fine sand, with grains less than 150 micrometres across. "It's finer than sugar, but coarser than something like flour," says Ken Edgett, principal investigator for the rover's Mars Hand Lens Imager, which has taken detailed pictures of the material.

SAM took several scoops from the Rocknest site in early October, shaking its tray and dumping out the first few loads to clean the instrument and make sure any Earthly molecules were flushed out of its system. The fifth scoop was delivered to SAM's oven, which baked it until the compounds inside released their signature gases.

The results revealed chlorinated carbon compounds, which probably formed inside SAM's oven. So where did the carbon came from? Even after a thorough rinse with the initial soil scoops, it's possible the SAM oven still contains traces of Earthly carbon.

If it is Martian in origin, the carbon may be from organic hydrocarbons or inorganic carbonates. The chlorine, meanwhile, may be from chemicals called perchlorates, which were previously spotted by NASA's Phoenix lander near the Martian north pole.

The team will compare the result with tests of a sample of carbon-based material that Curiosity brought from Earth, said Paul Mahaffy, SAM's principal investigator, at the AGU meeting. "If we see the same stuff that we thought might be from Mars, we've got to say, 'Hold the show, this might be terrestrial stuff'."

Because the sand at Rocknest is representative of material blown from around the Martian surface, the new results provide a decent baseline for describing the planet's global conditions. The data will later be compared with layers of rock at the rover's ultimate destination, a 5-kilometre-tall mountain called Aeolis Mons or Mount Sharp, which rises from the centre of Gale crater. Some of these layers formed more than 3 billion years ago, when Mars was thought to be warmer, wetter and may have supported life.

Curiosity's sampling of the Martian soil has also revealed that the ratio of

deuterium—the heavy isotope of hydrogen—to ordinary hydrogen is five times higher on Mars than on Earth. That discovery may help us work out when and how the Red Planet lost most of its atmosphere.

Curiosity is now getting ready for its trek to Aeolis Mons, taking in other points of interest en route. Grotzinger likens Curiosity to a car with a 10,000-page user manual that was still being written as the science team tested its instruments. With all the gear up and running, it's time to drive, he says. "Our car is ready to go."

(Adapted from New Scientist, December 2012, written by Peter Aldhous and Lisa Grossman)

Notes

- **Curiosity Mars rover** 好奇号火星车，是美国国家航空航天局的火星探测项目，于 2011 年 11 月 26 日发射，在 2012 年 8 月 6 日降落火星。预计将运作至少一个火星年（约 2 个地球年），调查火星以前或现在存在生命的可能性。
- **Jet Propulsion Laboratory** 喷气推进实验室，建于 1936 年，位于加利福尼亚州帕萨迪那，是美国国家航空航天局的一个下属机构，负责为美国国家航空航天局开发和管理无人太空探测任务，行政上由加州理工学院管理。
- **Pasadena** 帕萨迪娜，美国城市，位于加利福尼亚州洛杉矶的东面。
- **American Geophysical Union** (AGU) 美国地球物理联盟，是地球物理学的非营利组织，会员超过 50,000 人，并来自 135 国。AGU 的活动着重在组织和传递国际地球物理学跨学科的资讯。
- **Gale crater** 盖尔环形山，是位于火星的一个古老撞击坑，形成于大约 3.5 亿至 3.8 亿年前。该环形山由层状岩石构成，层状岩石中含有黏土和硫酸。这些物质和地貌的形成都与水有关。2011 年 7 月，美国宇航局将盖尔环形山确定为好奇号火星车的火星着陆地点。
- **Phoenix Lander** 凤凰号火星探测器，是美国国家航空航天局的 2007 年火星探测计划。这项计划的主要目的对火星的北极地区环境进行探测，寻找火星北极土壤中可能存在的生命特征，对浅层地下的水冰进行研究。 2008 年 11 月，凤凰号与地面控制中心失去联络。

New Words

tantalising ['tæntəlaɪzɪŋ]
adj. arousing desire or expectation for something unattainable or mockingly out of reach 诱人的，挑逗的

whiff [wɪf]
n. a short light gust of air 一阵风

chlorine ['klɔ:ri:n]
n. a common nonmetallic element belonging to the halogens; best known as a heavy yellow irritating toxic gas; used to purify water and as a bleaching agent and disinfectant; occurs naturally only as a salt (as in sea water) 氯

intriguing [ɪn'tri:gɪŋ]
adj. capable of arousing interest or curiosity 有趣的，迷人的

feverish ['fi:vərɪʃ]
adj. marked by intense agitation or emotion 高度活跃或兴奋的

speculation [ˌspekjʊ'leɪʃən]
n. a message expressing an opinion based on incomplete evidence 思考，推断

inorganic [ɪnɔ:'gænɪk]
adj. relating or belonging to the class of compounds not having a carbon basis 无机的

carbonate ['kɑ:bəneɪt]
n. a salt or ester of carbonic acid (containing the anion CO_3) 碳酸盐

sniff [snɪf]
vi. & vt. to perceive by inhaling through the nose 深深吸入，发现

rinse [rɪns]
vt. to wash off soap or remaining dirt 漂洗，冲洗

hydrocarbon [ˌhaɪdrə'kɑ:bən]
n. an organic compound containing only carbon and hydrogen 碳氢化合物，烃

perchlorate [pə'klɔ:reɪt]
n. a salt of perchloric acid 高氯酸盐

terrestrial [tə'restrɪəl]
adj. of or relating to or inhabiting the land as opposed to the sea or air 陆地的，地球的，类地行星的

baseline ['beɪslaɪn]
n. the back line bounding each end of a tennis or handball court 底线，（棒球场的）垒线，基线

deuterium [dju:'tɪərɪəm]
n. an isotope of hydrogen which has one neutron (as opposed to zero neutrons in hydrogen) 氘，重氢

trek [trek]
n. any long and difficult trip 艰苦的跋涉

en route [ɒŋ'ru:t]
adv. on a route to some place 在途中

Phrases and Expressions

far cry	长距离，天壤之别
touch down	降落，着陆
fire up	点火，点燃，发动（机器）
give off	放出，散发出，放射出
flush out of	（从隐蔽处）驱逐出去
gear up	换高速挡，做好行动准备

Exercises

Questions 14—20

Complete the summary below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each answer.*

On 6 August, NASA's Curiosity Mars 14___________ landed on Mars. It baked Martian soil and found 15___________ and 16___________ that have reacted with 17___________. The founding is 18___________ but it's still no clear whether the 19___________is the true chemical nature of Mars or of Earth. Even if it's Martian material, it may come from 20___________. This can not prove the sign of life in Mars because organics-carbon-containing compounds are the building blocks of life.

Questions 21—24

Choose the correct letter ***A, B, C*** *or* ***D****. Write the correct letter in blanks* ***21–24****.*

21. Curiosity Rover bake Martian soil to ___________.
    A eat
    B get energy
    C kill bacteria
    D analyse the gas

22. The grains of sand which SAM picked up are ___________.
    A bigger than flour
    B smaller than flour
    C better than sugar
    D bigger than sugar

23. SAM shaked its tray and dumped out of the first few loads of sand ___________.
   A to shake off Earthly contaminants
   B to bake the soil
   C to analyse the Earthly molecules
   D to make sure if they were the right sand it wanted

24. Which site of sand or rock in Mars may help us to detect signs of life?
   A Sand at Rocknest.
   B Rock at Aeolis Mons.
   C Sand on the Martian surface.
   D Sand on Phoenix.

21. ___________ 22. ___________ 23. ___________ 24. ___________

Questions 25—27

Translate the sentences from the passage into Chinese.

25. This taste of carbon is intriguing, but it is a far cry from recent feverish speculation that the rover had found definitive evidence for organic compounds on Mars.

____

____

26. The result is only one of the intriguing chemical discoveries the rover has pulled from a wind-blown patch of sand at a site dubbed Rocknest, unveiled on 3 December at the American Geophysical Union (AGU) Fall Meeting in San Francisco.

____

____

27. Curiosity's sampling of the Martian soil has also revealed that the ratio of deuterium—the heavy isotope of hydrogen—to ordinary hydrogen is five times higher on Mars than on Earth.

____

____

Reading Passage 3

What Clones?

On November 25, 2001, a Massachusetts biotechnology company, Advanced

Cell Technology (ACT), reported in an online journal—e-biomed: *The Journal of Regenerative Medicine*—that it was the first to clone human embryos. In a concurrent article in the January *Scientific American*, the researchers explained that their results could "represent the dawn of a new age in medicine by demonstrating that the goal of therapeutic cloning is within reach." Therapeutic cloning—in contrast to reproductive cloning, intended to create a baby—would produce the stem cells needed to treat diabetes, paralysis and other now incurable conditions.

Many leading scientists, however, say the work should never have been published, because the research failed on several counts to achieve its goals. First, ACT didn't produce any stem cells. But more fundamentally, some investigators questioned the company's basic assertion about having actually cloned human embryos.

In the experiment, the ACT researchers injected cumulus cells into eggs that had had their nuclei removed. (Cumulus cells nurture eggs in the ovary.) The investigators hoped that the cumulus cells' DNA would launch the process of early embryonic development that leads to a hollow sphere called a blastocyst, which would contain stem cells. Among the eight eggs injected with cumulus cells, two divided until they became four-cell embryos, and one proceeded until it reached six cells. Eleven other eggs injected with the nucleus of a skin cell failed to develop.

According to some biologists, a cloned embryo would attain its true status as an embryo only when the DNA from the cumulus cell that was transferred into the egg began transcription (in which the cell's genes begin to issue instructions to make proteins for embryonic development). An egg contains genetic material (RNA) and proteins that were made during the formation of the egg within the ovary and can support development up to the eight-cell stage without any signals from the DNA in the nucleus.

Thus, the ACT experiment may have been "running on fumes, purely directed by RNA and supported by proteins that were present in the egg," says John Eppig, a developmental and reproductive biologist at Jackson Laboratory in Bar Harbor, Me. Eppig adds that "there's no published information on a cloned human embryo. Whether someone has done it and not published it, your guess is as good as mine. This [result] is not it." (There was one previous claim of multicell embryo clones, but the findings were not published.)

Eppig is not alone. "It's shocking to me that this would be published and that they would have attempted to publish; it's the total failure of an experiment,"

says Rudolf Jaenisch, a cloning expert at the Whitehead Institute for Biomedical Research at the Massachusetts Institute of Technology.

Michael D. West, the president and chief executive of ACT, says that his group has adopted an approach that resembles that of Bob Edwards, the British scientist whose research resulted in 1978 in the first test-tube baby. Edwards published each step of his studies. That, in West's view, helped to foster openness about a controversial procedure. "The reason we decided to publish this was purely because we're promoting the idea of human therapeutic cloning, and we felt it was important to be transparent about where we're at and publish frequently," West states. He explains further that "when we were sure that we had gotten this far and had these results, we felt there was a publishable paper there."

William Haseltine, editor in chief of *e-biomed* and chairman of the biotechnology company Human Genome Sciences, defended the decision to publish. "It was a small but significant first step," he says of the research. The paper, Haseltine describes, went through a standard review process in which "two or more" reviewers, not including him, vetted the paper. He refuses to identify the reviewers, saying only that they did not include editorial board members from ACT.

Haseltine also criticizes scientists for voicing their skepticism in the press instead of writing letters to the journal or attempting to replicate the results. He says that scientists may have made such sharp comments partly because of "deep frustration" over the prohibition against any federally funded research that destroys human embryos: "There are those who would express frustration that they think they can do the work better, and indeed it is possible they could, but [they] cannot do it." He also blames *Scientific American* and *U.S. News and World Report*, which released their articles at the same time as e-biomed, for the subsequent frenzy. "Part of the public furor," Haseltine says, "was generated by the weight that the *Scientific American* publication also gave to this story and of course *U.S. News.*"

Scientific American editor in chief John Rennie says that he and staff editors debated whether to publish the article. "We were disappointed that it wasn't a more clear-cut demonstration of an embryo that was further along," Rennie says. "But it was still worth doing this." The likelihood of intense public interest in the result as the first documented human cloning demonstration justified the decision, he explains. "It was also our intention to continue to follow the story and provide other points of view on this, including dissenting ones," Rennie elaborates.

Critics of the ACT paper say that the dispute has not helped the case for therapeutic cloning. "In a controversial area you should have at least one part clean and scrutinized, which is the scientific part, and then you can go to the public and discuss all the other considerations, like ethical and moral, ideological and religious [ones]," remarks M.I.T.'s Jaenisch. The U.S. House of Representatives has already voted to ban cloning, whether for therapeutic or reproductive purposes. Last December the Senate declined to take up a measure to place a moratorium on the procedure, but the debate will resume this year.

During a December Senate hearing, West stated that he would be disappointed if ACT couldn't obtain cloned stem cells within six months. In an interview Jose B. Cibelli, the ACT researcher who performed the cloning procedure, also states: "Give me 200 human eggs, and I'll give you cloned human stem cells." Whether such declarations prove to be prescience or braggadocio remains to be seen. But one thing seems certain: one way or another, ACT will find a way to keep its research endeavors squarely in the public eye.

(Adapted from *Scientific American*, February 2002, written by Gary Stix)

Notes

- **Advanced Cell Technology** (ACT) 先进细胞技术公司，总部位于美国马萨诸塞州。该公司专注于研究针对多种疾病的细胞学疗法，2010 年获得美国食品药品管理局的批准进行胚胎干细胞治疗的临床实验。
- ***Scientific American***《科学美国人》，美国的一本科普杂志，创刊于 1845 年 8 月 28 日，是美国历史最长的、一直连续出版的杂志，也是著名的《科学》(*Science*) 的姊妹刊，被认为是大众化的高水平学术期刊。
- **cumulus cell** 卵丘细胞
- **DNA** (Deoxyribonucleic Acid) 脱氧核糖核酸
- **genetic material** 细胞核
- **RNA** (Ribonucleic Acid) 核糖核酸
- **Bar Harbor** 巴港，美国缅因州东南部一小镇，在蒙特沙漠岛上，是一处避暑胜地。
- **Human Genome Sciences** 人类基因组科学公司，1992 年在美国成立，主要通过研究人类基因序列来开发蛋白质和抗体类药品，与多个生物技术公司和制药公司合作。
- ***U.S. News and World Report***《美国新闻与世界报道》，美国综合性报道和评论的英文周刊，1948 年由《美国新闻》和《世界报道》两种杂志合并而成。

New Words

regenerative [rɪ'dʒenəˌreɪtɪv]
adj. tending to or characterized by regeneration 再生的，恢复的，更生的

concurrent [kən'kɜːrənt]
adj. existing, happening, or done at the same time 同时发生的，同时存在的

therapeutic [ˌθerə'pjuːtɪk]
adj. of or relating to the healing of disease 治疗（学）的，疗法的

diabetes [ˌdaɪə'biːtɪs]
n. a disorder of the metabolism causing excessive thirst and the production of large amounts of urine 糖尿病

paralysis [pə'rælɪsɪs]
n. inability to act or function in a person, organization, or place 瘫痪

incurable [ɪn'kjʊːrəbl]
adj. (of a sick person or a disease) not able to be cured 无法治愈的，不能矫正的

cumulus ['kjuːmjʊləs]
n. cloud forming rounded masses heaped on each other above a flat base at fairly low altitude 积云

nurture ['nɜːtʃə]
vt. to care for and encourage the growth or development of 养育，培育，培植

ovary ['əʊvəriː]
n. a female reproductive organ in which ova or eggs are produced, present in humans and other vertebrates as a pair 卵巢

transcription [træn'skrɪpʃən]
n. a written or printed representation of something 抄本，抄写

fume [fjuːm]
n. gas, smoke, or vapour that smells strongly or is dangerous to inhale 烟气，烟雾

transparent [træns'peərənt]
adj. (of an organization or its activities) open to public scrutiny（机构或其活动）受公众监督的，透明的

vet [vet]
vt. to make a careful and critical examination of (something) 审查（某人过去的记录、资格等）

skepticism ['skeptɪˌsɪzəm]
n. a person inclined to question or doubt all accepted opinions 怀疑态度，怀疑论

replicate ['replɪˌkeɪt]
vt. to make an exact copy of; reproduce 复制

frenzy ['frenzɪ]
n. a state or period of uncontrolled excitement or wild behaviour 狂乱，极度的激动，狂怒

furor ['fjʊərˌɔː]
n. an outbreak of public anger or excitement 喧闹，狂热，狂怒

clear-cut ['klɪə'kʌt]
adj. sharply defined; easy to perceive or understand 轮廓鲜明的，清晰的

scrutinize ['skruːtnˌaɪz]
vt. to examine or inspect closely and thoroughly 仔细检查

moratorium [ˌmɔːrə'tɔːriːəm]
n. a temporary prohibition of an activity（行动，活动等的）暂停，暂时禁止

prescience ['priːʃiːəns]
n. the power to foresee the future 预知，先见

braggadocio [brægə'dəʊʃɪəu]
n. boastful or arrogant behaviour 自夸，吹牛大王

endeavor [en'devə]
n. an attempt to achieve a goal 努力，尽力

squarely ['skweəliː]
adv. directly, without deviating to one side 直接地，正对着地

Exercises

Questions 28—34

*Do the following statements agree with the information given in the passage? In brackets **28—34**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

28. (   ) The aim of therapeutic cloning was to create a baby.

29. (   ) The ACT's results shouldn't have been made known for failure on several

grounds to attain its goals.

30. (　　) The ACT researchers had eggs nuclei removed by injecting cumulus cells into them.

31. (　　) Among the eight eggs injected with cumulus cells, five failed to develop.

32. (　　) Jaenisch and Eppig share the same idea that the experiment of human embryo clones shouldn't be published because it failed.

33. (　　) West has gained a personal instruction from Edwards about publishing possibilities.

34. (　　) Haseltine supported the idea of publishing the paper of ACT experiment.

Questions 35—38

Complete the sentences below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

35. Haseltine criticizes Scientific Amerian and U.S. News for arousing ____________ by giving weight to the story.

36. Scientic American published the results for many reasons, among which is possible ____________.

37. M.I.T's Jaenisch comments that therapeutic cloning also involves disputes over ____________, and ideological and religious parts.

38. ACT is sure to work out a way to maintain its ____________ to attract public attention.

Questions 39—40

Translate the sentences from the passage into Chinese.

39. But more fundamentally, some investigators questioned the company's basic assertion about having actually cloned human embryos.

____

____

40. The investigators hoped that the cumulus cells' DNA would launch the process of early embryonic development that leads to a hollow sphere called a blastocyst, which would contain stem cells.

____

____

Unit 18

Section A

Reading Passage 1

Banking on Connections to Spur Offshore Wind

Bringing order to the Internet was one thing, but can Google and a team of fellow investors and energy firms bring an offshore wind power revolution to the East Coast of the United States?

They are going to try, with a $5 billion deep-water transmission cable project designed to connect high-energy ocean wind turbines from Virginia to New Jersey. The electric transmission company Trans-Elect said Tuesday its Atlantic Wind Connection project (AWC) would be built 22 miles offshore in five segments. And its lineup of star investors includes Google, the private equity firm Good Energies, and Japan's Marubeni Corporation.

Great Potential, Slow Development

The windy Eastern seaboard of the United States packs enough punch to generate all of the electricity needed by Delaware, Massachusetts, and North Carolina, as well as most of the power for New Jersey, Virginia, and South Carolina, renewable energy supporters have calculated from the energy potential maps. Yet the U.S. lags far behind Europe in this area, after being mired in a years-long dispute over whether the turbines would mar the views from Cape Cod. (The federal government signed the first lease on the Cape Wind project last week.)

Financing also has been difficult, especially when there's plenty of windy land in the Great Plains for less expensive onshore turbines. So even in waters off the coast of Galveston, Texas, where developers hoped to take advantage of lower regulatory hurdles to the launch the first U.S. offshore wind development, the first turbine is expected to go into the water only this year—five years after the project was first announced.

Backers of the Atlantic transmission project want to connect the turbines to

guarantee steady power even in intermittent winds, an innovation that has the potential to change the dynamic.

"This can dramatically accelerate development of renewable energy," said Rick Needham, green business operations director for Google. "This is in line with our commitment to a clean energy future, where we believe that being good environmental stewards makes good business sense."

Hope for Power and Jobs

The transmission backbone would be designed to connect to the grid onshore at four points: northern New Jersey, southern New Jersey, Delaware, and southern Virginia. It would have the capacity to transmit 6,000 megawatts of energy, which backers say would increase the reliability of the existing power grid and reduce the threat of blackouts.

"Perhaps the most exciting thing of all is that thousands and thousands of new jobs are going to be created by the industry that will be made possible because of the investments," said Bob Mitchell, chief executive of Trans-Elect.

The jobs numbers the team cited are impressive. According to the U.S. Department of Energy, the project could create more than 43,000 permanent operations and maintenance jobs if 54,000 megawatts of offshore wind turbines are installed by 2030. That would be about 50 percent more wind capacity than is currently installed onshore across the United States.

Oceana, an ocean conservation group that has urged greater deployment of wind power instead of oil and gas development offshore, estimates that 200,000 new jobs would be made possible through the development of wind energy along the Atlantic coast. But this offshore jobs surge would require a sea change in the industry to include U.S. manufacturers. Denmark's Vestas and Germany's Siemens currently manufacture 90 percent of the offshore turbines deployed around the world.

Few Regulatory Obstacles?

The Federal Energy Regulatory Commission must approve the energy transmission project, as would PJM Interconnection, which operates the electric grid in 13 mid-Atlantic states and the District of Columbia.

The Department of the Interior also must approve the project. Interior Secretary Ken Salazar has shown support for offshore wind development, and Mitchell said

he expects him to grant permission.

State permits will be needed when the four connection points are developed within three miles of the coast, the point at which states have jurisdiction over the sea. Virtually all governors of mid-Atlantic coastal states have touted ideas for harnessing the 60,000-megawatt potential of the mid-Atlantic ocean winds.

Trans-Elect hopes to begin construction of the first phase in 2013 and said the final phase would likely not be completed until 2021. In addition to government permits, new systems are needed for PJM to monitor and assess consumer costs.

Some of the platforms at sea would be similar to land substations except they could pack more power: Instead of 500- or 800-megawatt capacity, Mitchell hopes to have 1,000-megawatt stations.

The AWC wind turbine farms would be built 22 miles from shore—17 miles farther out than the Cape Wind project that has caused such furor in Massachusetts, which will be built only five miles from the mainland shore. The developers say the turbines would be barely visible from beaches and residences. The oceanic turbines will be larger than their land counterparts, with 90-meter hubs and 60-meter blade lengths.

Most wind turbines onshore are 1.5 megawatts. Mitchell is planning to use high-capacity 5- or 10-megawatt turbines—although those are still in developmental stages.

The system would use high-voltage direct current instead of the high-voltage alternating current found in most wind farms. According to Trans-Elect, HVDC cables are cheaper, have lower energy loss, and use less copper than HVAC cables.

Getting Steady Power From Wind

The backbone transmission idea is designed to address one of the chief drawbacks of wind power—its intermittent availability. But in a study published earlier this year, researchers at the University of Delaware and Stony Brook University showed how wind power flow could be stabilized off the Atlantic Coast if the turbines were electrically connected and meteorologically configured. The study analyzed wind data collected over five years from 11 meteorological stations along 1,500 miles of the East Coast. The AWC project would cover only a portion of that geography, but the research indicated that a mid-Atlantic transmission grid would provide a stable source of energy.

"I very much think that a resource allowing us to connect offshore wind turbines would go a long way in leveling the baseline wind energy available," said Dana Veron, meteorologist and co-author of the study.

Veron, an assistant professor at the University of Delaware, said connecting wind-based generators over an extended area has "demonstrated there [are] very few periods of time with little or no power."

(Adapted from http://news.nationalgeographic.com, written by J. Okray)

Notes

- **wind farm** 风力发电场
- **Atlantic Wind Connection** (AWC) 大西洋风能网，从新泽西一直延伸到弗吉尼亚，为西海岸最大的能源消费市场提供电能。

New Words

turbine ['tɜːbaɪn]
n. an engine or a machine that uses the pressure of liquid or gas on a wheel to get power（涡）轮机，叶轮机，汽轮机

equity ['ekwətɪ]
n. company shares that can be bought and sold on a stock market 股本，股份

mire ['maɪə]
vt. to sink in the mud 陷入泥中，陷入困境

backer ['bækə]
n. someone who gives help or money to a plan or organization 支持者，后援者

intermittent [ˌɪntə'mɪtənt]
adj. happening sometimes but not regularly or often 间歇的

steward ['stjuːəd]
n. someone whose job was to take care of a house or land for someone else in the past 管家

megawatt ['megəwɒt]
n. a unit for measuring electrical power, containing one million watts 兆瓦（特）

blackout ['blækaʊt]
n. darkness resulting from the extinction of lights 断电，停电

surge [sɜːdʒ]
n. a sudden or abrupt strong increase 激增

jurisdiction [ˌdʒuərɪs'dɪkʃən]
n. the right and power to interpret and apply the law 管辖，权限之内

harness ['hɑːnɪs]
vt. to get control of something in order to use it for a particular purpose 控制，治理

substation ['sʌbsteɪʃən]
n. a subsidiary station where electricity is transformed for distribution by a low-voltage network 变电站，变电所

voltage ['vəultɪdʒ]
n. the rate at which energy is drawn from a source that produces a flow of electricity in a circuit; expressed in volts 电压，伏特数

configure [kən'fɪgə]
vt. to set up for a particular purpose 配置，设定

Phrases and Expressions

lag far behind	远远落后于
in line with	一致，符合
make sense	（话等）有意义，合理，有道理
alternating current	交流电

Text Analysis

The essay introduces readers a new green energy—wind energy. It can be roughly divided into five parts in terms of the subheadings.

Part one covers the first two passages, informing readers that Google and other fellow investors are planning on AWC—an offshore wind power revolution to the East Coast of the United States.

Part two consists of four paragraphs from Paragraph 3 to Paragraph 6. Though great efforts and energy potential made and calculated by the Windy Eastern seaboard and renewable energy supporters respectively (Paragraphs 3, 5 & 6), the new green energy has still been suffered from both environmental pressure and financial shortage (Paragraphs 3 & 4).

Part three is made up of four paragraphs from Paragraph 7 to Paragraph 10. This part addresses backers' good expectations on the new energy ranging from the power to employment. For example, they hope the transmission backbone would increase the reliability of wind power grid and reduce the threat of blackout in Paragraph 7. Most importantly, wind power would replace oil and gas energy and be developed fast. What' s more, the jobs numbers would increasingly created because of the development of wind power in Paragraphs 9 & 10.

Part four consists of eight paragraphs from Paragraph 11 to Paragraph 18. As far as the supervisory system is concerned, the writer presents his idea that AWC needs to be approved and monitored by different departments, like the Federal Energy Regulatory Comission, the Department of the Interior, PJM Inter Connection, etc. in Paragraphs 11, 12, 13 & 14. Then the writer states some planning details ranging from the construction plans from materials in Paragraphs 14, 15, 16, 17 & 18.

Part five is the very last subheading where the writer cites a study and two people's words to prove the project's reliability respectively, that is, though AWC covering only a portion of the East Coast, a mid-Atlantic transmission grid would provide a stable source of energy.

Exercises

Questions 1—5

*Do the following statements agree with the information given in the passage? In brackets **1—5**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1. (   ) Google is planning to start an energy revolution with other two companies.
2. (   ) People hesitate to accept offshore turbines because they worry that the turbines might destroy the scenery of Cape Cod.
3. (   ) U.S. makes strict rules which block offshore turbines development.
4. (   ) Rick Needham believes that AWC can boost the growth of renewable energy greatly.
5. (   ) As a result of conjunction of the grid onshore, people are in danger of power failure.
6. (   ) Workers welcome the coming of Atlantic transmission project because it will create thousands of jobs.

Question 7—10

*Answer the questions below. Choose **NO MORE THAN TWO WORDS** from the passage for each answer.*

7. Now, in the whole U.S., all the onshore wind capacity is about.

____

8. The construction course of energy transmission project will last.

____

9. The offshore wind turbine irritated people in Massachusetts because it is only constructed ______________ from the beach.

10. Researchers believed transmission grid could solve the biggest problem of wind energy, namely ______________.

Question 11—13

Translate the sentences from the passage into Chinese.

11. Backers of the Atlantic transmission project want to connect the turbines to guarantee steady power even in intermittent winds, an innovation that has the potential to change the dynamic.

____

____

12. Oceana, an ocean conservation group that has urged greater deployment of wind power instead of oil and gas development offshore, estimates that 200,000 new jobs would be made possible through the development of wind energy along the Atlantic coast.

____

____

13. Some of the platforms at sea would be similar to land substations except they could pack more power: Instead of 500- or 800-megawatt capacity, Mitchell hopes to have 1,000-megawatt stations.

____

____

Section B

Reading Passage 2

The Neuroscience of True Grit

In fall 2009 Jeannine Brown Miller was driving home with her husband after a

visit with her mother in Niagara Falls, N.Y. She came upon a police roadblock near the entrance to the Niagara University campus. Ambulance lights flashed up ahead. Miller knew her 17-year-old son, Jonathan, had been out in his car. Even though she couldn't make out what was happening clearly, something told her she should stop. She asked one of the emergency workers on the scene to check whether the car had the license plate "J Mill." A few minutes later a policeman and a chaplain approached, and she knew, even before they reached her, what they would say.

The loss of her son—the result of an undiagnosed medical problem that caused his sudden death even before his car rammed a tree—proved devastating. Time slowed to a crawl in the days immediately after Jonathan's death. "The first week was like an eternity," she says. "I lived minute by minute, not even hour by hour. I would just wake up and not think beyond what was in front of me."

Support came from multiple places, including her own personal decisions. Five hundred of Jonathan's classmates from Lewiston-Porter High School attended the wake and funeral, a demonstration of sentiment that helped to assuage the pain. She also found solace in her devout Catholic faith. After two weeks she returned to work as a human resources consultant. A couple of months after the accident she could visit the restaurant where she and her son had breakfasted the day he died. Support from the community never wavered. A ceremony honored Jonathan at the high school graduation, a Jonathan "J Mill" Miller Facebook page receives regular updates, and a local coffee shop serves "76" coffee in memory of his now retired football number. A year on she still cries every day, but she has found many ways to cope.

When the worst happens—a death in the family, a terrorist attack, an epidemic of virulent disease, paralyzing fear in the midst of battle—we experience a sense of profound shock and disorientation. Yet neuroscientists and psychologists who look back at the consequences of these horrific events have learned something surprising: most victims of tragedy soon begin to recover and ultimately emerge largely emotionally intact. Most of us demonstrate astonishing natural resilience to the worst that life throws our way.

The study of resilience is starting to uncover a series of underlying mechanisms through brain imaging and gene databases in addition to psychologists' traditional tools of social science questionnaires. After disaster strikes, biochemical, genetic and behavioral factors act together to restore our emotional equilibrium. Research seeks insights into the foundations of emotional

strength—an understanding that may someday teach us what to do when the natural healing processes fail.

In the meantime, schools, the military and the corporate world are not waiting for a complete picture of genes, neurotransmitters and the rest before embarking on programs to inoculate against life's biggest stresses. In the absence of a definitive handbook on hardiness, a vigorous debate has emerged over whether any attempt to toy with what may be an innate quality may leave us worse off. The debate has special urgency now, as the U.S. Army begins a gargantuan training program to inculcate resilience in more than a million soldiers and their families, perhaps one of the largest psychological interventions ever undertaken by a single institution.

The Mechanisms of Resilience

Sigmund Freud had written in 1917 of the necessity of "grief work" in which we take back the emotional energy, or libido, as he called it, that had been invested in the now "non-existent object"—in other words, the deceased. This century-old view of the psyche as a plumbing system for channeling subliminal life forces prevailed, in the absence of evidence to the contrary, until recent decades.That is when psychologists and neurobiologists began to probe for alternative explanations.

One of the things they began to look at is the nature of resilience. The term "resilience" joined the psychological lexicon from the physical sciences. In a psychological sense, says University of California, Los Angeles, resilience researcher Christopher M. Layne, "it basically means that you spring back to functioning in a short period," like a steel beam, which bends under stress and returns afterward to where it started. Of course, no little metal strip in our heads acts as a thermostat that bends when our emotions run hot, triggering a neurochemical cascade that returns us to a set point of emotional equilibrium. Scientists have found that our biology is more complicated than the analogy from metallurgy.

Resilience begins at a primal level. If someone takes a swing at you, the hypothalamus—a relay station in the brain that links the nervous and endocrine systems—churns out a stress signal in the form of corticotrophin-releasing hormone, which begins a chemical deluge telling you to put up your dukes or head for the hills. Your brain pulsates like a flashing light: fight or flight, fight or flight. Afterward, the biological typhoon subsides. If you are constantly called on to defend your turf, a set of stress hormones gush constantly. One of them, cortisol, produced by the adrenal glands near the kidneys, can actually

damage brain cells in the hippocampus and amygdala, regions involved with memory and emotion. So you end up an emotional and physical wreck. Luckily, the vast majority of us have resilience on our side.

Stress hormones, aided by certain protective biochemicals, seem to switch off more readily in people who are resilient. In recent years scientists have discovered a number of biological signposts that indicate that a person might be capable of toughing it out. The list is long and involves chemicals such as DHEA (dehydroepiandrosterone), which lessens the effects of cortisol, and neuropeptide Y, which appears to, among other things, reduce anxiety by counteracting the effects of corticotrophin-releasing hormone, released by the hypothalamus. In 2000 Dennis S. Charney and other researchers at the Yale University—affiliated VA Hospital in West Haven, Conn., found that under the intense stress of mock interrogations, U.S. soldiers with higher blood levels of neuropeptide Y performed better during the exercise. Later, in 2006, Rachel Yehuda and others at the Bronx Veterans Affairs Medical Center discovered that elevated levels of the chemical in combat veterans meant a lower risk of post-traumatic stress disorder.

Many biological pathways—chains of interacting proteins—contribute to something as multifaceted as resilience. So far, though, scientists have put together little more than a tantalizing collection of hints of the biological profile of the hardy soul. In May 2010 Eric J. Nestler of Mount Sinai Medical Center and his colleagues reported, for instance, on a protein, called DeltaFosB, that appears to protect mice and possibly humans against stress induced from being alone and isolated or threatened by more aggressive mice. DeltaFosB acts as a molecular switch that turns on a whole set of genes (inducing production of the proteins they encode). It registered high levels in resilient rodents and was deficient in postmortem brain tissue of depressed patients. A drug that boosts DeltaFosB might protect against depression and bolster resilience more generally.

Still, it will be a while before an energy drink gets stoked with resilience powder. A pill that ups the brain's production of DeltaFosB might one day become a reality. For the time being, the work remains confined to rodents, as investigators explore the subtleties of a chemical that not only enables mice to nobly withstand the best efforts of laboratory researchers to scare them to death but may also, more ominously, play a role in the rewarding sensations of drug addiction.

(Adapted from *Scientific American*, March 2011, written by Gary Stix)

Notes

- **Niagara Falls** 尼亚加拉大瀑布，位于美国和加拿大的交界处。
- **Sigmund Freud** (1856–1939) 西格蒙德·弗洛伊德，奥地利医生兼心理学家、哲学家、精神分析学的创始人，提出潜意识；主张人格结构的三层次；主张性欲论。
- **The hippocampus** 海马体，大脑中主要负责学习和记忆的区，日常生活中的短期记忆都储存在海马体中。

New Words

grit [grɪt]
n. fortitude and determination 刚毅，坚忍

chaplain ['tʃæplɪn]
n. a clergyman ministering to some institution（军队、医院、监狱等的）牧师

ram [ræm]
vt. to strike or drive against with a heavy impact 猛撞，猛压

eternity [ɪ'tɜːnətɪ]
n. a state of eternal existence believed in some religions to characterize the afterlife 永恒，不朽

wake [weɪk]
n. the consequences of an event (especially a catastrophic event) 守灵，守夜

assuage [ə'sweɪdʒ]
vt. to cause to be more favorably inclined; gain the good will of 减轻，缓和，平息，使安静

solace ['sɒləs]
n. comfort in disappointment or misery 安慰，安慰物

devout [dɪ'vaʊt]
adj. earnest 虔诚的，真诚的，诚恳的，献身于宗教的

waver ['weɪvə]
vi. to move back and forth 摇摆，踌躇，动摇

virulent ['vɪrələnt]
adj. extremely poisonous or injurious 剧毒的，致命的

disorientation [dɪsˌɔːrɪən'teɪʃən]
n. confusion (usually transient) about where you are and how to proceed 方向障碍，失去方向

resilience [rɪ'zɪljəns]
n. an occurrence of rebounding or springing back 弹性，快速恢复的能力，回弹

equilibrium [ˌiːkwɪ'lɪbrɪəm]
n. a stable situation in which forces cancel one another 平衡，均势，平静

neurotransmitter ['njʊərəˌtrænzmɪtə]
n. a neurochemical that transmits nerve impulses across a synapse 神经传递素

inoculate [ɪ'nɒkjʊleɪt]
vt. to perform vaccinations or produce immunity in by inoculation 预防注射

toy [tɔɪ]
vi. to behave carelessly or indifferently 玩弄，不认真地考虑

gargantuan [gɑː'gæntʃʊən]
adj. of great mass; huge and bulky 巨大的，庞大的

libido [lɪ'biːdəʊ]
n. a Freudian term for sexual urge or desire 本能冲动，性欲

psyche ['saɪkɪ]
n. that which is responsible for one's thoughts and feelings 灵魂，心灵，心智，精神

lexicon ['leksɪkən]
n. a language user's knowledge of words 词典，专门词汇

thermostat ['θɜːməstæt]
n. a regulator for automatically regulating temperature by starting or stopping the supply of heat 恒温（调节）器

cascade [kæ'skeɪd]
n. a small waterfall or series of small waterfalls 倾泻，小瀑布，瀑布状物

metallurgy [mə'tælədʒɪ]
n. the science and technology of metals 冶金，冶金学，冶金术

primal ['praɪməl]
adj. serving as an essential component 第一的，最初的，主要的，根本的

hypothalamus [ˌhaɪpə'θæləməs]
n. a basal part of the diencephalon governing autonomic nervous system 丘脑下部，下丘脑

relay ['riːleɪ]
n. a crew of workers who relieve another crew 接替人员，替班

endocrine ['endəʊkrɪn]

adj. of or belonging to endocrine glands or their secretions 内分泌（腺）的，激素的

corticotrophin [kɔːtɪkəʊ'trəʊfɪn]
n. a hormone produced by the anterior pituitary gland that stimulates the adrenal cortex 促肾上腺皮质激素，亲皮质素

deluge ['deljuːdʒ]
n. the rising of a body of water and its overflowing onto normally dry land 洪水，倾盆大雨

pulsate [pʌl'seɪt]
vi. to beat rhythmically 搏动，悸动，有规律地跳动

turf [tɜːf]
n. the territory claimed by a juvenile gang as its own 地盘，势力范围

gush [gʌʃ]
vi. to flow rapidly 喷涌，迸出

adrenal [ə'driːnəl]
adj. near the kidneys 肾旁的，肾上腺的

gland [glænd]
n. any of various organs that synthesize substances needed by the body and release it through ducts or directly into the bloodstream 腺，腺体

dehydroepiandrosterone [diː'haɪdrəʊepɪæn'drɒstərəʊn]
n. an androgenic ketosteroid 脱氢表雄（甾）酮，脱氢异雄（甾）酮

interrogation [ɪnˌterə'geɪʃən]
n. a sentence of inquiry that asks for a reply 讯问，审问，疑问句

subtlety ['sʌtltiː]
n. a subtle difference in meaning or opinion or attitude 精妙，细微的差别

ominously ['ɒmɪnəs]
adj. making you feel that something bad is going to happen 恶兆的，不吉利的

Phrases and Expressions

on the scene	在场，现场
churn out	艰苦地做出
on one's side	侧身，支持某人
tough it out	坚持，忍受

Exercises

Questions 14—20

Complete the summary below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

When disasters fall on human, they go through a huge shock and 14___________. But scientists discover most suffers can recover with the aid from 15___________. They suggest there are three 16___________ contributing to the recovery, and they further explore emotional strength in case that the 17___________ do not work. They claim, psychologically, resilience acts like 18___________ which can help people spring back in a short time. However, the mechanism of resilience is more difficult to understand than the 19___________. Blessed with some biological protection, people with resilience are much easier to say no to 20___________.

Question 21—23

Choose the correct letter ***A, B, C*** *or* ***D****. Write the correct letter in blanks* ***21—23****.*

21. What takes Jonathan's life ___________.

A a car accident.

B an illness

C alcohol

D sadness

22. What support does not clarify to help Miller recover from her sorrow?

A Facebook "J Mill" updates as usual.

B Her religion.

C Her job as a human resources consultant.

D Kindness from Jonathan's classmates.

23. Scientists believe ___________.

A DeltaFosB can absolutely help human relieve stress when they feel lonely

B DeltaFosB can be extracted from drug

C depressed patients' brain can produce more DeltaFosB

D resilient rodents have more DeltaFosB

21. ___________ 22. ___________ 23. ___________

Question 24—27

Translate the sentences from the passage into Chinese.

24. A few minutes later a policeman and a chaplain approached, and she knew, even before they reached her, what they would say.

____

____

25. The study of resilience is starting to uncover a series of underlying mechanisms through brain imaging and gene databases in addition to psychologists' traditional tools of social science questionnaires.

____

____

26. Sigmund Freud had written in 1917 of the necessity of "grief work" in which we take back the emotional energy, or libido, as he called it, that had been invested in the now "non-existent object"—in other words, the deceased.

____

____

27. For the time being, the work remains confined to rodents, as investigators explore the subtleties of a chemical that not only enables mice to nobly withstand the best efforts of laboratory researchers to scare them to death but may also, more ominously, play a role in the rewarding sensations of drug addiction.

____

____

Reading Passage 3

Work-life Balance

John Whitfield gauges a study that tackles the evolutionary conflicts behind workplace inequity.

A My grandmother was a cleaner; my mother was a medical doctor. That is a single example of how, in the course of a few decades, women's educational and professional opportunities have increased vastly. As of 2010, about 60% of US women were in the workforce, making up nearly half of all workers; the picture for most other developed nations is similar. Women can do just

about any job, and in many countries overt discrimination is illegal.

B But other statistics tell a different story. In 2010, women made up just 1 in 7 company board members and 1 in 40 chief executives of Fortune 500 companies. And women still earn less than men for the same jobs. In the United States and Britain, a female lawyer earns, on average, about three-quarters of her male counterpart's salary. For newly qualified US medical doctors, the pay gap is widening: 17% in 2008, up from 12.5% a decade before.

C In *The War of the Sexes*, Paul Seabright, an economist working at his subject's boundary with evolutionary biology, argues that human evolution can help to explain the inequities of today's white-collar, Western workplace. It is a story well worth hearing, but it is incomplete—partly because there is little decisive evidence for what causes gender gaps in employment, and partly because of some curious authorial choices.

D The first half is an excellent primer on why males and females have evolutionary cause to behave in different ways. Sperm, Seabright explains, are cheap and plentiful; eggs, the opposite. This tends to make females choosy about their mates, and males less so. So males must compete for female attention by fighting among themselves, or by seducing prospective mates with advertisements of quality, such as gifts of food. Such differences in sexual supply and demand create conflicts of interest and incentives for deceit.

E Paradoxically, our cooperative natures exacerbate these conflicts. Collaboration in child-rearing is key in humans because of the long childhood needed to grow a big brain. Men can provide resources such as meat, but in return, fathers and husbands have sought to control what (or, crudely but more accurately, who) women did.

F In the second half of the book, Seabright investigates how such conflicts might explain the dearth of women at the top of the career ladder. Using evidence drawn mostly from the upper echelons of business, Seabright suggests two causes of inequality.

G First, anyone who takes a career break suffers for it. Even years after returning to work, he or she can expect to be paid less than a colleague who stayed put. So, Seabright argues in a claim that is likely to be controversial, there is no systematic discrimination against women here—it is just that they tend to sacrifice office-time for child care. The cost of this, he says, results from a "signalling trap": to get to the top, an employee must work all hours,

not because it gets the job done, but because bosses take such behaviour as a sign of quality and commitment. Like a peacock investing in a huge tail to show off his good genes at the cost of his flying ability, this is hugely inefficient; but anyone who opts out unilaterally pays a disproportionate cost.

H Second, Seabright argues that women are disadvantaged by networking behaviour. Each sex, for example, prefers to network with its own kind. In a male-led workplace, therefore, men's social and professional networks tend to overlap more than women's, so women are less likely to find professional opportunities. The evidence for this is more preliminary than that for the effect of career breaks, but it points in the right direction. If you look in executive directors' pay packets, for example, women seem to benefit less than men from being well connected.

I Throughout the book, Seabright is terrific company—entertaining and convincing. In a debate in which both sides tend to fit the evidence to their ideology, he lets the data take the lead. His recommendations for a more equal workplace, such as compulsory sex balance on job shortlists and mandatory paternity leave, are sensible and modest. Yet as a whole, *The War of the Sexes* doesn't quite hang together.

J The first half shows that natural selection has given men and women different priorities, and so different strategies. But struggled to make the leap from the economics of sex to the economics of work, including the modern pay gap. I would have liked to see a chapter stopping off midway between prehistory and the present, to look at how developments such as agriculture affected men and women. As Seabright notes, the biological similarities between the sexes show that women's "subordinate and dependent" state must be a relatively recent development—in which case, it seems odd to rely so heavily on the distant past.

K In particular, the missing 10,000 years leave Seabright nowhere to tackle sexism and bullying. He assumes that people are rational and well-meaning. There is little discussion of cultural barriers to equality, such as male bosses' desire to keep women subordinate and dependent even if it costs them money. This is where those at the sharp end of the problem lay the blame: last month, a survey of women in UK banking found that three-quarters think that the biggest hurdle to equality is the attitude of senior male managers.

L If this were a book by a science writer, I would no doubt be moaning that it sought to explain all of human life by shoehorning it into one grand idea.

Because it is a book by an academic, I'm moaning that it under-coheres, that the circumspection and caveats impede its argument. This is a dispatch from a field in its infancy, and the gaps in its thesis reflect the holes in our knowledge. But with people such as Seabright working to fill them, we can at least be optimistic that we will eventually understand what causes inequality, if perhaps less positive that we can fix it.

(Adapted from *Nature*, April 2012, anonymous)

New Words

gauge [geɪdʒ]
vt. to determine the capacity, volume, or contents of by measurement and calculation 估计，测量

counterpart ['kaʊntəpɑːt]
n. a person or thing having the same function or characteristics as another 对手，对应物

choosy ['tʃuːzɪ]
adj. difficult to please 挑剔的，讲究的

primer ['praɪmə]
n. an introductory textbook 初级读本，入门（书）

sperm [spɜːm]
n. the male reproductive cell; the male gamete 精子

paradoxically [ˌpærə'dɒksɪklɪ]
adv. in a paradoxical manner 荒谬地，自相矛盾地

exacerbate [ɪg'zæsəbeɪt]
vt. to make worse 恶化，加剧

dearth [dɜːθ]
n. an insufficient quantity or number 缺乏

echelon ['eʃəlɒn]
n. a body of troops arranged in a line（军队，飞机，船只等的）梯队

controversial [ˌkɒntrə'vɜːʃəl]
adj. marked by or capable of arousing controversy 有争论的，争议的

unilateral [ˌjuːnɪ'lætrəl]
adj. involving only one part or side 单方面的，片面的，仅影响一方的

disproportionate [ˌdɪsprə'pɔːʃənət]
adj. out of proportion 不均衡的，不匀称的，不相称的

ideology [ˌaɪdɪɒlədʒɪ]
n. imaginary or visionary theorization 意识形态，思想体系，思想观念

compulsory [kəm'pʌlsəri]
adj. required by rule 强迫的，强制的，义务的

shortlist ['ʃɔ:tlɪst]
n. a list of applicants winnowed from a longer list who have been deemed suitable and from which the successful person will be chosen 决选名单，入围名单

paternity [pə'tɜ:nətɪ]
n. the kinship relation between an offspring and the father 父亲身份，父权，父系

sexism ['seksɪzəm]
n. discriminatory or abusive behavior towards members of the opposite sex 性别歧视，大男子主义

bullying ['bʊlɪ]
n. a cruel and brutal fellow 恃强凌弱，欺凌

hurdle ['hɜ:dl]
n. an obstacle that you are expected to overcome 障碍，困难

moan [məʊn]
vi. to indicate pain, discomfort, or displeasure 呻吟，呜咽，悲叹，哀泣

shoehorn ['ʃu:hɔ:n]
vt. to fit for a specific purpose even when not well suited 塞进

circumspection [ˌsɜ:kəm'spekʃən]
n. the trait of being circumspect and prudent 慎重

dispatch [dɪ'spætʃ]
vt. to send away towards a designated goal 调度，差遣

infancy ['ɪnfənsɪ]
n. the early stage of growth or development 发展或成长的初期，婴儿期，幼儿期

Phrases and Expressions

stay put	保持，停住不动，原位不动
opt out	撤退，退出，辞职，脱离
take the lead	起带头作用，居首位
hang together	符合，团结一致，结合
leap from	飞跃，跳跃
stop off	停留

Exercises

Questions 28—33

*The passage has twelve paragraphs, **A—L**. Choose the correct heading for Paragraphs **A—F** from the list below.*
*Write the correct number **i—ix**, in blanks **28—33**.*

List of Headings
i men are stronger than women
ii inequality between sexes
iii women love to rear child
iv the contribution to further study despite the flaw of the book
v the bosses have discrimination gender
vi natural selection offers men priorities over women
vii Seabright tries to find out the factors for inequality in the workplace
viii women's condition has greatly improved
ix the argument over the statement in the book

28. Paragraph **A** ____________
29. Paragraph **B** ____________
30. Paragraph **C** ____________
31. Paragraph **D** ____________
32. Paragraph **E** ____________
33. Paragraph **F** ____________

Questions 34—37

*Below are listed some reasons, **A—F**, for inequality between sexes. Which **FOUR** of these reasons are shown by Seabright to explain the inequality between sexes?*
*Write the correct letter in blanks **34—37**.*

A biological similarities
B the role of parents
C cultural barrier
D evolutionary selection
E boss' discrimination
F different level of knowledge between sexes
G office rules expected by boss

H official system against women

I the difference communicative ability between sexes

34. ____________ 35. ____________ 36. ____________ 37. ____________

Questions 38—40

Translate the sentences from the passage into Chinese.

38. In *The War of the Sexes*, Paul Seabright, an economist working at his subject's boundary with evolutionary biology, argues that human evolution can help to explain the inequities of today's white-collar, Western workplace.

____

____

39. His recommendations for a more equal workplace, such as compulsory sex balance on job shortlists and mandatory paternity leave, are sensible and modest.

____

____

40. This is where those at the sharp end of the problem lay the blame: last month, a survey of women in UK banking found that three-quarters think that the biggest hurdle to equality is the attitude of senior male managers.

____

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Unit 19

Section A

Reading Passage 1

Rural Tourism as a Tool for Poverty Alleviation in Africa

Poverty in Africa is predominantly rural. More than 70% of the continent's poor people live in rural areas and depend on agriculture for food and livelihood, yet in recent years, many rural areas have suffered from a decline in the capacity of agriculture to provide livelihood for their inhabitants and development assistance to agriculture is decreasing. In sub-Saharan Africa, more than 218 million people live in extreme poverty.

In many African economies, the rural situation is characterized by continuing stagnation, poor production, low income and increasing vulnerability of poor people. Lack of access to markets is a problem for many small-scale enterprises in Africa. The rural population is often isolated beyond reach of safety nets. They are vulnerable to diseases like HIV/AIDS which has put an unbearable strain on poor rural households where labour is the primary income earning asset. In addition, health care services are often inadequate or nonexistent.

In Uganda, the majority of the rural poor are women, and like their counterparts throughout the African continent face many challenges: they work longer hours than men, have limited access to resources, and exercise little or no control over what they produce. The result is that women are among the worst affected by poverty. In addition, women bear the greater burden of caring for the sick and the children orphaned by HIV/AIDS. Their daily responsibilities leave them overstretched, and their ability to assure that the family is fed becomes severely compromised.

Poverty is not only about lack of basic necessities which can be purchased in life such as shelter, food, clothing, and medical facilities. In this context, poverty renders a person helpless, they have no voice in society and are unable to express themselves, their views are not sought nor appreciated and self-esteem destroyed.

This kind of poverty which is prevalent in most parts of rural Uganda often leads to depression, helplessness, and puts one in compromising situations where they have no control.

Uganda which is located astride the Equator in East Africa is often referred to as the Pearl of Africa, a name bestowed upon Uganda by the former British Prime Minister, Winston Churchill because of the unique beauty and scenery. Uganda is a lush greenbelt that stretches over 21,000 square miles making this part of East Africa seem like one gargantuan golf course. It has varied landscapes and scenery, vegetation, climate, various people and cultures, legends and historical archeological sites, most of which are unique features in rural Uganda.

Uganda has been experiencing a growing trend in tourism, a major attraction being the mountain gorillas in their natural habitat, the green environment, hospitality and culture of the people. The new niche traveler is seeking opportunities that are in rural areas, for instance, clean air, unique culture, organic foods, and scenic landscapes. There is now need to create relevant support systems for increasing the capacity of rural people to meet the demand and change from agriculture to tourism enterprises.

Rural tourism is gaining momentum in Africa owing to world-wide demand for new attractions from wild life. It has potential to create economic opportunities, which are especially important in rural areas where few opportunities exist.

Tourism can give small but significant earnings for poor individuals. It is a sector which is coming up in many parts of the developing world, for instance in Asia and South America where rural people are supplementing their incomes with tourism.

Rural tourism can be an alternative source of income offering a range of variable non-financial benefits that decrease vulnerability, such as access to information and infrastructure in rural areas. It has immense benefits both for the rural poor communities participating and also for the tourists or visitors. For long, tourism has been focused on visiting lakes, rivers, visiting game parks and other tourist destinations and the people in those areas just sit back and watch as visitors come and go. They rarely, if ever, benefit or even participate. Rural tourism is an opportunity for the local people to join the mainstream tourism industry.

Rural tourism is good for women who would rather work close to home than commute long distances. Nevertheless, women and rural people in general need to be empowered to link their culture, environment, skills and indigenous knowledge to tourism to be able to utilize it as a source of livelihood.

Making some little conscious changes and a small amount of "know how", the local population will be able to get what they are entitled to, not only by offering a service or a local product but to offer the lifetime experience of meeting, working and living like them, providing the visitor a unique opportunity to have a taste of daily, common down-to-earth life. Tourism can be linked to poverty alleviation, used to promote the diversity of attractions and activities mainly found in rural areas and to generate income. In addition to the economical benefits for these communities, the tourist will open the door for a new vision and a gateway to understand, admire and share the abundant traditions of the people of Africa. After all, isn't this world all about People Helping People?

There is need to direct tourists to countryside, balancing the biased geographical distribution of tourists, offering opportunity to disperse benefits from tourism into rural economies.

However, for tourism to make a difference in the lives of the rural people in Africa there is need for a holistic approach that helps them learn how to do tourism as a business from village level to national and global perspective. Funding agencies focusing on environmental conservation in Africa should consider funding research and piloting rural tourism as a poverty alleviation tool. People cannot conserve what they do not benefit from. As long as developing agencies continue funding environmental conservation in isolation, their efforts will fail if issues of livelihoods and poverty are not addressed first. The poor rural people need to be availed alternative sources of livelihood and rural tourism is a viable alternative to promote sustainable use, management and conservation of the environment and natural resources.

(Adapted from *English (Second Edition)*, published by Chinese Agriculture Press in 2011, edited by Li Jianhua and Zeng Qingmin)

Notes

- **sub-Saharan Africa** 泛指撒哈拉沙漠中部以南的非洲，居民中以黑种人占绝大部分。
- **Uganda** 乌干达，非洲东部的一个内陆国家。

New Words

alleviation [əˌliːvɪ'eɪʃən]
n. the feeling that comes when something burdensome is removed or reduced 减轻，缓解，缓和

predominantly [prɪ'dɒmɪnəntlɪ]
adv. much greater in number or influence 占主导地位地，显著地，占优势地

stagnation [stæg'neɪʃən]
n. a state of inactivity 淤塞，停滞，不景气

vulnerability [ˌvʌlnərə'bɪlətɪ]
n. the state of being vulnerable or exposed 弱点，易伤性，致命性，脆弱性

astride [ə'straɪd]
prep. with the legs stretched far apart 两腿分开着，跨着，跨越

bestow [bɪ'stəʊ]
vt. to present 赠给，安置

lush [lʌʃ]
adj. produced or growing in extreme abundance 葱翠的，豪华的，丰富的

holistic [həʊ'lɪstɪk]
adj. emphasizing the organic or functional relation between parts and the whole 全盘的，整体的，功能整体性的

avail [ə'veɪl]
vi. & vt. to use to one's advantage 有益于，有益于，使对某人有利

viable ['vaɪəbl]
adj. capable of being done with means at hand and circumstances as they are 切实可行的，有望实现的

Phrases and Expressions

beyond the reach of	超出，超越能力之外
have access to	使用，接近，可以利用
supplement…with	增补，补充
be entitled to	有资格，有权

Text Analysis

This passage is about the development of rural tourism in Africa and its benefits on relieving poverty in rural Africa.

Part one, Paragraphs 1 & 2, gives brief features of poverty in African rural areas and roots for them.

Part two (Paragraphs 3, 4, 5 & 6) uses Uganda as an example of sub-Saharan Africa to show the effect of tourism development on this country. On one hand, the prevalent poverty

renders them helpless, no voice in society and destroyed self-esteem (Paragraph 4). On the other hand, the unique features in rural Uganda-varied landscapes and scenery, vegetation, climate, various people and cultures, legends and historical archeological sites, have been bringing a growing trend in tourism (Paragraph 5).

Part three (Paragraphs 7, 8, 9, 10 & 11) lists the benefits of rural tourism development. Foreigners create economic opportunities (Paragraph 7), give small but significant income for poor people (Paragraph 8), bring access to information and infrastructure (Paragraph 9), etc.

Finally, in part four (Paragraphs 12 & 13), the author proposes that the merits of rural tourism can be spread to rural economies. Furthermore, a holistic approach is suggested that helps locals learn how to do tourism as a business from village level to national and global perspective. Funding agencies should be set up to study the balance of environmental conservation and poverty alleviation in Africa.

Exercises

Questions 1—4

*Do the following statements agree with the information given in the passage? In brackets **1—4**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1. ( ) Majority of people in countryside of Africa can't depend on agriculture for survival.
2. ( ) Many challenges facing Uganda women make them overburdened and severely affected by poverty.
3. ( ) Poverty not only indicates shortage of basic necessities but also sours people's self-esteem and makes them helpless.
4. ( ) Tourism is booming because of global demand for wild life destinations.

Questions 5—7

*Choose the correct letter, **A**, **B**, **C**, or **D**. Write the correct letter in blanks **5—7**.*

5. The problems with rural places in Africa don't include ____________.
   A low income
   B decreasing agricultural assistance
   C shrinking labor force

D lack of food

6. The women in poor households in Uganda are overwhelmed by a series of tough issues exculding ___________.
   A enjoying limit access to resources
   B exerting limited control over products
   C herding animals
   D feeding families

7. Uganda is rich in terms of ___________.
   A vast golf course
   B animals in natural habitat
   C various people and culture
   D historical archeological sites

5. ___________ 6. ___________ 7. ___________

Questions 8—12

Complete the summary below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

Rural tourism is acquiring 8___________ in Africa, and promise to create economic opportunities. It can be a (an) 9___________ source of income to improve their welfare. Local people should join in actively the 10___________ touring sector. What's more, in addition to service or local product, visitors can be supplied 11___________ of living like locals. Essentially, a 12___________ to develop tourism form local, national and global vision can ensure the positive influence of tourism on local people.

Section B

Reading Passage 2

How Health Research Misdirects Us

A Mark Twain famously decried three kinds of lies: lies, damned lies, and statistics. While Twain himself was no statistician, he did hit upon an important idea. Physicians, scientists, and the general public should be

cautious about accepting many research reports at face value. The mere fact that biomedical researchers can find a statistically significant relationship between good health and a particular drug, nutritional supplement, dietary modification, or medical device does not in fact establish that it is healthful. Depending who is analyzing the statistics and how, numbers can lie, and in some cases, they can lure us to perdition.

B Consider vitamin E, which is actually a group of fat-soluble compounds necessary for good health. Vitamin E is a type of antioxidant, which means that it interferes with the production of highly reactive oxygen species when fats are oxidized. On this basis, proponents once believed that vitamin E supplementation would produce a host of health benefits, including lowering rates of heart disease and cancer and increasing longevity. Early studies provided statistical support for this point of view. However, it now appears that vitamin E supplementation not only is not associated with decreased mortality in adults but may in fact slightly increase it.

C When research finds a positive relationship between some intervention and good health despite the fact that no such positive relationship actually exists, we call it a false positive finding. There are many reasons that false positive findings frequently appear in both the popular press and the scientific literature. These reasons were beautifully summarized by Professor John Ioannidis of Tufts University in *Why Most Published Research Findings Are False*. Simply put, some research models make it more likely for reported research results to be false than true, in part because a great deal of research merely amplifies preexisting biases.

D Anyone making health and lifestyle decisions based on the scientific literature or reports of its findings in the popular press needs to understand these pitfalls. One of the most important concerns is the wide latitude researchers enjoy in defining outcomes and designing studies. In many cases, reported outcomes are very far removed from health. For example, a drug may reliably lower blood pressure or cholesterol levels but provide no benefit when it comes to reducing heart attacks and strokes or prolonging life. In some cases, such drugs produce a number of undesirable side effects, and in others they actually turn out to increase mortality rates.

E Improving one isolated health parameter such as blood pressure does not necessarily make us healthier overall. To take an extreme case, we have long had at our disposal a substance that is extremely effective against high blood pressure. No one, no matter how high their blood pressure, will remain hypertensive after they take it. In fact, there is no substance known

to medicine that can produce a greater reduction in blood pressure. On the downside, the substance in question is an extremely lethal poison. When physicians think about whether or not to prescribe a drug, we need to look at its effect on the whole patient, not just some particular laboratory value.

F Another major pitfall concerns the powerful incentives for producing positive results. A great deal of research on drugs and medical devices is funded by profit-seeking corporations, which have a strong interest in seeing their investments bear fruit. The more money such a company invests in developing a new drug or device, the more urgent it becomes to see a substantial return on that investment. The same is true, though perhaps to a lesser degree, for publically funded research. In both cases, people who cannot demonstrate that shareholders' or taxpayers' money has been well spent may suffer for it.

G One important example of this bias is the reporting of antidepressant efficacy. One analysis of articles in the scientific literature concluded that the effectiveness and benefit/risk ratio of the most popular class of antidepressants had been greatly exaggerated. For example, of 74 studies registered with the Food and Drug Administration, 37 that showed positive results were published in journals, while 22 that showed negative results were not. Moreover, 11 studies that showed negative results were published in a way that suggested a positive result. Overall, 94 percent of published studies indicated a positive result, when only 51 percent were actually positive.

H Simply put, positive results are good business. There is money to be made every time a new drug or device is brought to market. It draws public interest and makes for good news copy. And it is something that most consumers and patients are hungry for. Wouldn't it be great if we could lower our blood pressure, narrow our waistlines, increase our energy levels, elevate our moods, and prolong our lives simply by taking some new pill or making use of some new medical device?

I Similar incentives apply to researchers. The careers of physicians and scientists depend in part on how much interest we generate in our discoveries and how much research funding we can attract. Generally speaking, positive results are far more likely than negative ones to result in a presentation at a scientific meeting or a publication in a scientific journal. Major awards are virtually never presented to researchers for negative results, including even results that contradict previous positive reports. Egaz Moniz received the Nobel Prize in Medicine for developing a form of frontal lobotomy, but the researchers who later showed its poor benefit/risk ratio were not similarly recognized.

J In some cases, teams of researchers vie with one another in pursuit of statistically significant results. When this happens, the probability that at least one team will come up with positive results is increased, largely because unlikely results become more likely as we increase the number of trials. If one person flips a coin, the probability of coming up with four heads in a row is very low. On the other hand, if 100 people flip a coin four times, there is a good chance that at least one person will get four heads in a row. If only the people who get positive results report their findings, it will appear as though the probability of getting four heads in a row is far higher than it really is.

K Likewise, a drug may have little or no beneficial effect. But if a sufficient number of researchers conduct trials to assess its efficacy, and if these studies are designed in such a way that the probability of a positive result is high (for example, by looking for only a very small effect), then there is a good chance that some researchers will be able to report positive results. In such situations, which are relatively common, the probability that positive results will be found may be not only high but greater than that of negative results. As Ioannidis has demonstrated, the probability of reporting false results often exceeds that of true results.

L In most cases, there is probably little harm in eating more foods that are high in antioxidants, making use of nutritional supplements such as fish oil, or taking an extra vitamin tablet each day. We may be wasting money, but the sums involved are generally not high, and it is quite possible that we are achieving some benefit from the placebo effect associated with believing that we are taking good care of ourselves. But when such drugs and devices cost large sums of money and carry substantial risks, we should think twice and then think again before jumping on the parade of fads that often characterizes the health beat.

M We all want a shortcut, some magic pill or device that will make up for our bad choices, promote our health, and prolong our lives. The market for such a drug would be worth a huge sum of money. For this reason, someone will always be on hand to provide it to us, for a handsome price. But in the final analysis, living wisely matters most. Where health is concerned, this means having meaningful work in life (whether paid or not), eating moderately from a wide variety of foods, exercising in moderation, getting plenty of sleep, and avoiding excess. The latest research findings offer no substitute for living well.

(Adapted from http://www.theatlantic.com/health/archive/2013/03/how-health-research-misdirects-us/274203/, written by Richard Gundermanmar)

Notes

- **lobotomy** 脑叶白质切除术，是一种神经外科手术，包括切除脑前额叶外皮的连接组织，有时会被简称为脑白质切除术、脑叶切断术等。
- **placebo effect** 安慰剂效应，指病人虽然获得无效的治疗，但却“预料”或“相信”治疗有效，而让病患症状得到舒缓的现象。

New Words

lure [lʊə]
vt. to provoke someone to do something through (often false or exaggerated) promises or persuasion 吸引，引诱

perdition [pɜː'dɪʃən]
n. final and irrevocable spiritual ruin 毁灭

antioxidant ['æntɪ'ɒksɪdənt]
n. substance that inhibits oxidation or inhibits reactions promoted by oxygen or peroxides 抗氧化剂，硬化防止剂

oxidize ['ɒksɪdaɪz]
vt. to enter into a combination with oxygen or become converted into an oxide（使某物）氧化，（使某物）生锈

mortality [mɔː'tælətɪ]
n. the quality or state of being mortal 死亡，死亡率

amplify ['æmplɪfaɪ]
vt. to increase in size, volume or significance 放大，扩大，增强

pitfall ['pɪtfɔːl]
n. a trap in the form of a concealed hole 陷阱，圈套，诱惑

parameter [pə'ræmɪtə]
n. any factor that defines a system and determines (or limits) its performance 参数，参量，限制因素，决定因素

hypertensive [ˌhaɪpə'tensɪv]
adj. having abnormally high blood pressure 高血压的

lethal ['liːθəl]
adj. of an instrument of certain death 致命的，致死的，能致命的

waistline ['weɪstlaɪn]
n. the narrowing of the body between the ribs and hips 腰围，（衣服的）腰身部分

Phrases and Expressions

at one's disposal	供任意使用，可自行支配
vie with	竞争
in a row	成一行，一字儿，接连，一连

Exercises

Questions 13—19

Complete the sentences below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

13. Biomedical researchers' findings of the __________ between good health and a new medicine or vitamin, etc, does not necessarily support their positive effect on our health.

14. Though with support of research, __________ actually can't produce a series of health benefits as expected in reducing heart disease and increasing life span.

15. According to Professor John Ioannidis, the false positive findings in popular press and the scientific literature are rooted in certain __________.

16. Those working out __________ decisions by referring to health reports in popular press should be careful enough to realize the pitfalls involved.

17. Physicians can't look at __________ of a drug only while making decision of prescription, rather, its effect on the whole patient values more consideration.

18. Corporations aiming to seek profits sponsor medical research in developing new drug or device and consequently become the __________ for producing positive findings.

19. We may be wasting money buying nutritional supplements or taking some vitamin pills but possibly there are some benefits from the __________ with our belief in their positive effect.

Questions20—25

The passage has thirteen paragraphs, ***A—M****. Which of the Paragraphs,* ***F—K*** *and* ***M****, contains the following information?*
Write the correct letter, ***F—K*** *and* ***M****, in blanks* ***20—26****.*

20. The more teams there are competing for statistically significant results, the more likely such findings there are.

21. The effectiveness the most popular class of antidepressants had been greatly amplified.

22. Researchers announcing positive findings are more likely to obtain chance to make presentation.

23. After analyzing the latest studies, we should adopt the view that the basic principles of living wisely matters substantially.

24. The efficacy of a drug will be reported positively by researchers through studies with high probability of a positive results.

25. Research funded publically is also expected to bring substantial return on the investment.

26. Most consumers and patients are expecting positive findings, new drugs and devices.

20. __________ 21. __________ 22. __________ 23. __________

24. __________ 25. __________ 26. __________

Reading Passage 3

Diving for the Secrets of the Battle of the Atlantic

A It's a World War II campaign largely forgotten, a coastal reign of terror Joe Hoyt and a team of marine archaeologists are determined to bring into sharp focus 70 years later.

B During the first six months of 1942, German U-boats, often hunting in wolf packs, sank ship after ship just miles off the East Coast of the United States, concentrating their ambushes along North Carolina, where conditions were most favorable. From the beaches, civilians could see the explosions as the submarines sank more Allied tonnage in those months than the entire Japanese Navy would destroy in the Pacific during the entire course of the war.

C German submariners dubbed it the "American Shooting Season." While estimates of the carnage vary according to where boundaries are drawn, one survey concluded that 154 ships were sunk and more than 1,100 lives lost off the North Carolina coast in that period.

D "It's always surprised me that it's not something everyone knows. It was the closest war came to the continental United States," says Hoyt, a marine archaeologist with the National Oceanographic and Atmospheric Association's *Monitor* National Marine Sanctuary staff in Newport News, Virginia. "For six months, there were sinkings nearly every day off the coast. We think it's an

important part of American history."

E Flowing like massive rivers in the sea, the cold-water Labrador Current from the north and the warm Gulf Stream from the south converge just off Cape Hatteras. To take advantage of these currents, vessels must draw close to the Outer Banks. This area off the North Carolina coast is a bottleneck where U-boat commanders knew they'd find plenty of prey. In addition, the Continental Shelf comes close to shore, offering deep water nearby where they could attack and hide.

F Hoyt says 50 to 60 Allied, Axis and merchant vessel wrecks rest off the North Carolina coast. Hoyt has led teams of NOAA researchers for four summers looking for and surveying wrecks from those World War II battles. A sonar survey last year revealed 47 potential sites. Whether they are 1942 wrecks, ruins from another time or just geologic anomalies will require further research. The project's ultimate goals are to produce a comprehensive report on the wartime shipwrecks, create detailed models of the locations and channel the findings into museum exhibits or film productions. Key to that is the video work by a team of 3-D camera operators from the Woods Hole Oceanographic Institution using both divers and remote vehicles rigged with cutting-edge equipment.

G The 3-D cameras don't just produce dramatic video; they also allow researchers to create detailed models of wreck sites from the comfort of their offices, without extensive measuring on the seabed. Because their lenses are offset providing three points to determine where something is in space, the cameras create thousands of stereo still images that become a digital data set researchers use to build detailed, highly accurate models of wreck sites.

H "It can help you learn about how the actual engagement took place," Hoyt says. "You can look at torpedo damage or collision damage. You only see one section at a time when you're underwater. You're not able to step back and see the whole thing because of the water quality. So we try to create through video or a photo mosaic an overall image so you can get a good conceptualization of the site."

I Evan Kovacs, director of 3-D photography for Woods Hole, has been photographing wrecks, including the USS *Monitor* and the RMS *Titanic*, for more than a decade. "One of the greatest things about 3D from a storytelling perspective is its immersive quality," Kovacs says. "You're able to bring

people there. You're underwater, surrounded by sharks. There's all of the innards and guts of the ships. It's going to be pretty spectacular."

J Hoyt wants to do more than create models of individual wreck sites; he wants to map where battles took place and understand why they happened there. "We're looking at the collection of wrecks out there in the landscape and how they tell a story of why this area was significant and why it was seized upon by U-boat commanders as a good place to operate," he adds.

K One battle Hoyt and his team were searching for took place on the afternoon of July 15, 1942. KS-520—a convoy of 19 merchant ships headed from Hampton, Virginia, to Key West, Florida–steamed about 20 miles off the North Carolina coast with war supplies. U-boats, at times hunting in wolf packs, had been viciously attacking the shipping lanes, especially off Cape Hatteras, sending 154 vessels to the sea floor along the East Coast.

L Escorting the convoy were five naval vessels, two Kingfisher floatplanes and a blimp. Lying in wait was the U-576, a 220-foot-long German submarine that had been attacked days earlier, suffering damage to its ballast tank. But Hans-Dieter Heinicke, its commander, couldn't resist attacking, firing four bow torpedoes. Two struck the *Chilore*, an American merchant ship. One hit the *J.A. Nowinckel*, a Panamian tanker, and the fourth tore into the *Bluefields*, a Nicaraguan merchant ship loaded with kapok (a ceiba tree product), burlap and paper. Within minutes, the *Bluefields* went to the bottom.

M Just after firing, the U-576 popped to the surface only a few hundred yards from the Unicoi, an armed merchant vessel that fired upon it. The Kingfisher aircraft dropped depth charges and soon after sailors from the convoy saw the U-boat upend, props spinning out of the water, and spiral to the bottom.

N Hoyt thinks it could be the only site off the coast where an Allied vessel and a German U-boat sank so close to each other. "It's my hope that we have already gotten a ping on one of those, but it's a matter of getting back, getting detailed imagery or an assessment of the site to be able to identify them," he adds.

O The team extensively filmed the wreck of the U-701 in 100 feet of water. In June 1942, the submarine set 15 mines in the approaches to the Chesapeake Bay, Hampton Roads and the Baltimore Harbor resulting in the damaging or sinking of five ships, including a destroyer, a trawler, and two tankers. On

the afternoon of July 7, 1942, the U-701 surfaced to air its interior and was spotted by an A-29 bomber, which dropped three depth charges, tearing open the hull of the diving submarine and sending it to a watery grave.

P The NOAA team surveyed the Diamond Shoals site, an area of high currents and shifting sands. "In 2008, the boat was almost completely covered," Hoyt says. "Now, it's totally exposed so we're seeing a lot more of the wreck. We're also learning because it's been covered up for so long that it's much more well preserved than some of the other sites."

Q Seventy years later even on the bottom, the relic remains fearsome. The conning tower rises above the rest of the wreck, giving it an ominous profile. "It's incredible," Kovacs says. "You're looking at the old killer of the sea. You can see figuratively and literally how this thing would strike fear."

R "Forgetting about what really happened," he adds, "is not something we should be allowed to do."

(Adapted from http://www.smithsonianmag.com/history-archaeology/Diving-for-the-Secrets-of-the-Battle-of-the-Atlantic.html#ixzz2JvlnZXeK, written by Jim Morrison)

Notes

- **U-boat** 潜艇，来自德语。
- **Allied** 同盟国
- **Labrador Current** 拉布拉多寒流，来自北冰洋沿拉布拉多半岛南下的洋流，是流经加拿大北极群岛和拉布拉多半岛东岸的一支寒流。
- **Gulf Stream** 湾流，是世界上第一大海洋暖流，亦称墨西哥湾（暖）流。
- **Cape Hatteras** 哈特拉斯角，位于美国北卡罗来纳州。
- **Continental Shelf** 大陆架，是大陆向海洋的自然延伸，通常被认为是陆地的一部分。
- **Axis** 轴心国
- **Woods Hole Oceanographic Institution** 伍兹霍尔海洋研究所，位于马萨诸塞州伍兹霍尔，是美国大西洋海岸的综合性海洋科学研究机构，是世界上最大的私立的、非营利性质的海洋工程教育研究机构。
- **USS Monitor** 莫尼特号，来自排水量 987 吨，是美国南北战争时期北军舰队的一艘装甲战舰。于 1862 年 12 月因风暴沉没于北卡罗来纳州附近海域。
- **RMS Titanic** 泰坦尼克号，是一艘豪华邮轮，于 1912 年 4 月处女航时撞上冰山后沉没。

New Words

dub [dʌb]
vt. to give something or someone a name that describe them in some way 授予称号，起绰号

carnage ['kɑːnɪdʒ]
n. the savage and excessive killing of many people 大屠杀，残杀

sanctuary ['sæŋktʃʊərɪ]
n. a shelter from danger or hardship 避难所，庇护所，圣所，庇护

sonar ['səʊnɑː]
n. a measuring instrument that sends out an acoustic pulse in water and measures distances in terms of the time for the echo of the pulse to return 声呐装置，声呐系统

rig [rɪg]
vt. to put ropes, sails etc. on a ship 给（船、桅杆）装配帆及索具

torpedo [tɔː'piːdəʊ]
n. a long narrow weapon that is fired under the surface of the sea and explodes when it hit something 鱼雷

mosaic [məʊ'zeɪɪk]
n. art consisting of a design made of small pieces of colored stone or glass 马赛克，镶嵌图案，镶嵌工艺

convoy [kən'vɔɪ]
n. a collection of merchant ships with an escort of warships 护航队，护送

escort ['eskɔːt]
vt. to accompany as to protecting 护送，护卫

ballast ['bæləst]
n. any heavy material used to stabilize a ship or airship 压舱物，压载物

kapok ['keɪpɒk]
n. a plant fiber from the kapok tree, used for stuffing and insulation 木棉花，木丝棉，红棉

ceiba ['seɪbə]
n. tropical American trees with palmately compound leaves and showy bell-shaped flowers 木棉树，木棉

burlap ['bɜːlæp]
n. coarse jute fabric（由黄麻制的做麻袋等用的）粗麻布

upend [ʌp'end]
vt. to set, turn, or stand on end 颠倒，倒放

hull [hʌl]
n. dry outer covering of sth. 果皮，外皮，船壳，船体

Exercises

Questions 27—33

Answer the questions below. Choose ***NO MORE THAN THREE WORDS*** *from the passage for each answer.*

27. What is the group of archaeologists to uncover about the war around 1940s?

____

28. Which part of the US were the attacks focused on during the first half year of 1942?

____

29. How many casualties were there in the "American Shooting Season" according to a survey?

____

30. What is the place where the cold and the warm current meet utilized by German U-boats?

____

31. What are among the ships wrecks besides those of Allied and Axis vessels along the North Carolina coast?

____

32. What is key to the realization of the ultimate goals of the team of archaeologists studying the shipwrecks?

____

33. What can be produced by the 3-D cameras with which the researchers can create accurate models of wreck sites?

____

Questions 34—40

Complete the table below. Choose ***NO MORE THAN TWO WORDS*** *from the passage for each blank.*

Besides models of individual wreck sites, Hoyt wants to map where battles took place and understands why they happened there. Here are some stories from the wrecks:

The stories	The German U-boats	The Allied vessels
The only site off the coast where an Allied vessel and a German U-boat sank so close to each other	34__________, with damage to its ballast tank, finally suffered from 35__________ and sank	36__________, a convoy of 196 merchant ships loaded with 37__________.
The doom of a German U-boat	The U-701 set mines which resulted in the 38__________ and sinking of five ships	A-29 bomber sent it to a 39__________by tearing open its 40__________.

Unit 20

Section A

Reading Passage 1

Country Life Movement

By the late 19th century, immigration and industrialization had begun to fundamentally restructure American society. Even though the majority of people still lived in rural areas, it was clear that the future lay in the rapidly expanding cities. By 1898, prices for agricultural commodities began to rise, lessening economic discontent in the countryside and ushering in what was called the “golden age of agriculture,” which lasted until 1918.

However, the rise in consumer prices, rural outmigration, and growing farm tenancy coupled with elusive farm ownership and the possibility of future agricultural shortages, began to worry urbanites. For the first time in American history, they perceived deterioration in the conditions of “country life” as a potential source of problems for the Nation as a whole.

Country people were moving to the cities throughout the Western industrializing world, But it took on special significance in the United States for “this had always been a nation of farmers and farm people. Its institutions, government, traditions, even the very character of its people had been shaped in a rural environment, ...” The immigration of millions of southern and eastern Europeans was troubling to the racial and ethnic sensibilities of some Americans, who feared that this foreign influx would dilute the “native stock” even further if the countryside was depopulated.

Some “country-lifers” were also concerned about shortages of natural resources and became active in the new conservation movement that had begun in the late 19th century. In turn, Conservationism and the Country Life movement were part of the wider movement known as Progressivism that was directed primarily at reforming government and big business.

From 1900 to 1920, more Americans became aware of rural conditions and

problems than at any other time in our history. Thousands of articles on rural life were published in popular press and scholarly journals, and many conferences were held to discuss the social and economic conditions of farm families. The first "Back-to-the Land" movement took place during these years, briefly flourishing until running out of steam in the early 1910s. Social science survey work got its start during the Country Life movement, and so many surveys were carried out that one commentator called these years the "era of the survey." As a result, the main practitioners of survey work, members of the new discipline of rural sociology, bolstered their previously fragile position in academia.

There was much talk during the Country Life movement. There was less action. The time was not yet ripe for ambitious government programs. Most country-lifers were relatively conservative and did not favor the creation of structured government programs, knowing that the even more conservative and independent farm population would have resisted them.

Country-lifers were mainly urban academics, journalists, writers, ministers, or businessmen who, like most urbanites of that time, had grown up on farms. Some were so-called "urban agrarians" who were believers in the "agrarian myth" of the farmer as the bulwark of republican moral virtues and feared that migration to the cities would corrupt those virtues. They wanted to find ways to make country life more attractive so that farmers would not feel compelled to leave and thus would continue to provide the cities with their moral examples and their agricultural products.

Some social scientists were more concerned about the putative effects of rural "degeneration" on the Nation and its food supply. In order to counteract what they thought was the growing rigidity, narrowness, and anarchy of rural life, they spent much of their time contemplating ways to rehabilitate institutions such as the country school, country church, and local counts, government so that they would more closely resemble urban models. Although they had different values, urban agrarians and social scientists could cooperate because both saw the need for institutional reform—for the urban agrarians as a way to preserve idealized rural institutions and values suffering under the stress of economic change and for social scientists as the solution to rural degeneration.

A third group of country-lifers, however, was more economically hard-minded, eschewing talk of traditional rural values and institutional reform for exhortations that farmers must act like businessmen. They were especially represented in the extension movement, which, beginning at the turn of the century, sought to

convert farmers to "scientific agriculture" through practical demonstration and education. In the long run, they probably had the biggest impact because, of all the groups, they were most in tune with the economic changes transforming agriculture at the turn of the century. The cities wanted a cheap, reliable, and abundant supply of food. Industrial agriculture was the best way to produce it.

For nearly 20 years, these groups of country-lifers attempted to collaborate, each paying respect to the ideas of the others in their journals and meetings, but eventually the differences became too great. In 1919, the urban agrarians constituted the National Country Life Association. A year later, the business-oriented faction came together as the American Farm Bureau Federation, representing the political and economic interests of wealthier and more technologically progressive farmers.

(Adapted from http://www.doc88.com/p-789444727042.html,
written by Dennis Roth)

Notes

- **progressivism** 进步主义，是一种在 19 世纪末至 20 世纪初从北美开始的政治运动和意识形态，此意识形态属于中间偏左，但不是所有中间偏左派皆是进步主义的支持者。
- **rural sociology** 农村社会学，也称乡村社会学，是研究以农业或相关产业为主要经济活动、居住在农村地区的人们组成的农村社区为对象的社会学分支学科。

New Words

tenancy ['tenənsɪ]
n. an act of being a tenant or occupant 租用，租赁

elusive [ɪ'lu:sɪv]
adj. difficult to describe; be difficult to detect or grasp by the mind 难以捉摸的，不易记住的，逃避的，难以找到的

urbanite ['ɜ:bənaɪt]
n. a person who lives in a city 都市人

deterioration [dɪˌtɪərɪə'reɪʃən]
n. process of changing to an inferior state; a symptom of reduced quality or strength 恶化，变坏，退化，堕落

influx ['ɪnflʌks]
n. the process of flowing in 流入，注入，汇集（指人或物）

dilute [daɪ'luːt]
vt. to corrupt, debase, or make impure by adding a foreign or inferior substance 稀释，冲淡

depopulate [ˌdiː'pɒpjʊleɪt]
vt. to reduce in population（使）人口减少

practitioner [præk'tɪʃənə]
n. someone who practices a learned profession 从业者，执业者

bolster ['bəʊlstə]
vt. to support and strengthen 支持，支撑，鼓励，援助

academia [ˌækə'diːmɪə]
n. the academic world 学术界，学术环境

agrarian [ə'greərɪən]
adj. relating to rural matters 土地的，农业的，农村的

bulwark ['bʊlwək]
n. an embankment built around a space for defensive purposes 堡垒，保障，支柱

putative ['pjuːtətɪv]
adj. commonly put forth or accepted as true on inconclusive grounds 一般认定的，推定的，假定存在的

degeneration [dɪˌdʒenə'reɪʃən]
n. the process of declining from a higher to a lower level of effective power or vitality or essential quality 变性，退化，恶化，变质

rigidity [rɪ'dʒɪdətɪ]
n. the physical property of being stiff and resisting bending 坚硬，严格，刚直，死板

anarchy ['ænəkiː]
n. a state of lawlessness and disorder (usually resulting from a failure of government) 混乱，无秩序，无政府状态

contemplate ['kɒntəmpleɪt]
vi. to think intently and at length, as for spiritual purposes 沉思，深思熟虑

rehabilitate [ˌriːə'bɪlɪteɪt]
vt. to restore to a state of good condition or operation 使复原，修复，使恢复原状

eschew [ɪs'tʃuː]
vt. to avoid and stay away from deliberately; stay clear of 避开，回避

exhortation [ˌegzɔː'teɪʃən]
n. a communication intended to urge or persuade the recipients to take some action 敦促，极力推荐

Text Analysis

This passage is concerned with the fundamental restructure of American society in the "golden age of agriculture" roughly around 1898-1918. The urbanites in the industrializing country came to perceive deterioration in the conditions of "country life" as a potential source of problems for the Nation as a whole. Hence were the country-lifers, who were part of a broad movement known as Progressivism. (Part one: Paragraphs 1, 2 & 3)

Part two (Paragraphs 4, 5, 6, 7, 8 & 9) intends to offers a brief picture of country life movement based on journal articles, conferences and social science survey. A new discipline of rural sociology became prominent and there was more talk than action in moving to countryside (Paragraph 4). Broadly, three types of country-lifers are identified and their viewpoints are summarized. Country-lifers were mainly urban academics, journalists, writers, ministers, or businessmen who had grown up on farms. "Urban agrarians" were keen to "agrarian myth" (Paragraph 6), and they tried to renovate countryside structure so that they resemble more closely urban models (Paragraph 7). A third group of country-lifers was more economically hard-minded (Paragraph 8). Generally, for nearly 20 years, these groups of country-lifers paid respect to the ideas of the others in their journals and meetings but eventually the differences became too great and their collaboration broke (Paragraph 9).

Exercises

Questions 1—6

Complete the sentences below. Choose ***NO MORE THAN FOUR WORDS*** *from the passage for each answer.*

1. American agriculture, at the beginning of 20th century, went through ____________ with the price surge of farm products.

2. Urbanites, for the first time, were concerned about the ____________ in the situations of country life as causes of problem for the country.

3. Not only may the depopulation of the countryside, but also the ____________ spoil native genetic purity of American worried Americans.

4. Booming social science survey consequently contributed to strengthen the position of the ____________ of rural sociology in academia.

5. Country Life movement initiated more talk than actions because both country-lifers and farmers were ____________.

6. The groups of country-lifers exerted effort to work with each other, despite differences, by

___________ others' ideas and suggestion of measures.

Questions 7—13

Look at the following opinions and the three groups of country-lifers.
Match each statement with the correct group.
*Write the correct letter, **A—C**, in blanks **7—13**.*
NB: You may use any letter more than once.

The List of Groups
A Urban agrarians
B Some social scientists
C A third group

7. Believed in agrarian myth of the farmers as base of moral virtues.
8. Advocated that farmer should be economically minded and worked like businessmen.
9. Concerned about the influence of rural degeneration on the whole country.
10. Saw betterment of country life as a way to keep the stability of the farmers and agriculture.
11. Thought about ways to rebuild the institutions in American country.
12. Sought to turn farmers into scientific agriculture by exemplifications and education.
13. Tried to find ways for farmers to provide the cities with virtue examples and farm products.

7. __________ 8. __________ 9. __________ 10. __________
11. __________ 12. __________ 13. __________

Section B

Reading Passage 2

Anthropology Inc.

Forget online surveys and dinnertime robo-calls. A consulting firm called ReD is at the forefront of a new trend in market research, treating the everyday lives of consumers as a subject worthy of social-science scrutiny. On behalf of its corporate clients, ReD will uncover your deepest needs, fears, and desires.

A On a hot Austin night last summer, 60 natives convened for a social rite involving stick-on mustaches, paella, and a healthy flow of spirits. Young lesbians formed the core of the crowd. The two organizers, who had been lovers for a couple months, were celebrating their birthdays with a Spanish-themed party, decorated in bullfighting chic. It was a classic hipster affair, and everyone was loose and at ease, except for one black-haired interloper with a digital camera and a tiny notepad.

B This interloper was Min Lieskovsky, a 31-year-old straight New Yorker who mingled freely and occasionally ducked into a bathroom to scribble notes. She'd left a Ph.D. program in sociocultural anthropology at Yale two years earlier, impatient with academia but still eager to use the ethnographic skills she'd mastered. Tonight, that meant she partied gamely and watched her subjects with a practiced eye, noting everything: when the party got started and when it reached its peak, who stuck mustaches on whom—and above all, what, when, and how people drank.

C For Lieskovsky, it was all about the booze. The consulting firm she worked for, ReD Associates, is at the forefront of a movement to deploy social scientists on field research for corporate clients. The vodka giant Absolut had contracted with ReD to infiltrate American drinking cultures and report back on the elusive phenomenon known as the "home party." This *corrida de lesbianas* was the latest in a series of home parties that Lieskovsky and her colleagues had joined in order to write an extended ethnographic survey of drinking practices, attempting to figure out the rules and rituals—spoken and unspoken—that govern Americans' drinking lives, and by extension their vodka-buying habits.

D "There's a huge amount of vodka that's sold for drinking at home," Lieskovsky says. "But no one knew where it was really *going*"—apart from down someone's throat eventually, and on a bad night perhaps back up again. Was it treated as a sacred fluid, not to be polluted or adulterated except by an expert mixologist? Some Absolut advertising and iconography suggested exactly this, assuming understandably that buyers of a "premium" vodka would want laboratory precision for their cocktails. Another possibility was that the drinkers might not care much about the purity of the product, and that bringing it to a party merely lubricated social interaction. "We wanted to know what they are *seeking*," Lieskovsky says. "Do they want the 'perfect' cocktail party? Is it all about how they present themselves to their friends, for status? Is it collaboration, friendship, fun?"

E Over the course of the company's research, the rituals gradually emerged. "One after another, you see the same thing," Lieskovsky told me. "Someone comes with a bottle. She gives it to the host, then the host puts it in the

freezer and listens to the story of where the bottle came from, and why it's important." And then, when the bottle is served, it goes right out onto the table with all the other booze, the premium spirits and the bottom-shelf hooch mixed together, in a vision of alcoholic egalitarianism that would make a pro bartender or a cocktail snob cringe.

F What mattered most, to the partygoers and their hosts, were the narratives that accompanied the drinks. "We found that there is this general shift away from premium alcohol, at least as it's defined by price point, toward something that has a story behind it," Lieskovsky says. "They told anecdotes from their own lives in which a product played a central role—humorous, self-deprecating stories about first encountering a vodka, or discovering a liqueur while traveling in Costa Rica or Mexico." The stories were a way to let people show humor, or to declare that they're, for instance, the kind of Austin lesbians who, upon finding exotic elixirs in far-off lands, are brave enough to try them.

G ReD consultants fanned out and shadowed drinkers at about 18 different parties, trying to see which drinking practices held constant, whether in Austin, New York, or Columbus. This is one that did. Which meant that if a premium vodka brand tried to market itself solely as a product with chemistry-lab purity, it risked misunderstanding the home-party market and leaving money on the table.

H The corporate anthropology that ReD and a few others are pioneering is the most intense form of market research yet devised, a set of techniques that make surveys and dinnertime robo-calls ("This will take only 10 minutes of your time") seem superficial by comparison. ReD is one of just a handful of consultancies that treat everyday life—and everyday consumerism—as a subject worthy of the scrutiny normally reserved for academic social science. In many cases, the consultants in question have trained at the graduate level in anthropology but have forsaken academia—and some of its ethical strictures—for work that frees them to do field research more or less full-time, with huge budgets and agendas driven by corporate masters.

I The world of management consulting consists overwhelmingly of quantitative consultants, a group well known from the successes of McKinsey & Company, the Boston Consulting Group, and Bain & Company. ReD's entry into consulting represents an attempt to match the results of these titans without relying heavily on math and spreadsheets, and instead focusing on what anthropologists call "participant observation." This method consists, generally, of living among one's research subjects, at least briefly. Such immersive experiences lead not only to greater intimacy and trust, but also to a slowly emerging picture of the subjects' everyday lives and thoughts, complete with truths about them that they themselves might not know.

J Absolut, which paid ReD to observe home parties, is using both quantitative analysis and this new form of ethnographic research. "We are intensive consumers of market research," Maxime Kouchnir, the vice president of vodka marketing for Pernod Ricard USA, which distributes Absolut, told me. "The McKinseys and BCGs of the world will bring you heavy data. And I think those guys sometimes lack the human factor. What ReD brings is a deep understanding of consumers and the dynamics you find in a society." That means finding out not only what consumers say they want in a liquor, but also what their actions reveal about the social effect they crave from bringing it to a party. "If you observe them, they will be humans, exposed with all their contradictions and complexities," Kouchnir says. "At the end of the day, we manufacture a spirit, but we have to sell an experience."

K The method dates back nearly a century in academic anthropology, though its pedigree in the business world is somewhat more recent. Xerox PARC, the legendary Palo Alto think tank that birthed many of the ideas that made the personal-computing revolution possible, employed anthropologists as early as 1979. Leslie Perlow, a Harvard Business School professor who has applied participant observation in corporate environments, says, "There is a long history of doing this in the study of organization—taking the ethnographic method from anthropology and, instead of taking it to faraway places, trying to understand the culture of our own work worlds."

L Now a handful of consultancies specialize in ethnographic research, and many companies (including General Motors and Dell) retain their own ethnographers on staff. Microsoft is said to be the second-largest employer of anthropologists in the world, behind only the U.S. government.

M Tech firms, certainly, appear to be major consumers of ethnographic research. "Technology companies as a whole are in danger of being more disconnected from their customers than other companies," says Ken Anderson, an ethnographer at Intel. Tech designers succumb to the illusion that their users are all engineers. "Our mind-set is that people are really just like us, and they're really not," Anderson says. Ethnography helps teach the techie types to understand those consumers who "aren't living and breathing the technology" the way an Intel engineer might. (A curious exception to this cautious embrace of ethnographic methods is Apple, whose late co-founder, Steve Jobs, trusted his designers—and especially himself—more than he trusted consumers or researchers. "It isn't the consumers' job to know what they want," he famously said.)

(Adapted from http://theatlantic.com/magazine/archive/2013/03/anthropology-inc/309218/2/?single_page=true, written by Graeme Wood)

Notes

- **Robocall** 一种通过电话来达到宣传目标的形式，通过计算机控制实施自动拨号，播放预先录制好的音频。这种方式大大提高了传统电话宣传效率。通常用于电话销售，总统选举等。

New Words

anthropology [ˌænθrə'pɒlədʒɪ]
n. the social science that studies the origins and social relationships of human beings 人类学

paella [paɪ'elə]
n. saffron-flavored dish made of rice with shellfish and chicken（西班牙）肉菜饭，西班牙杂烩菜饭

lesbian ['lezbɪən]
n. of or relating to or characterized by homosexual relations between woman 女同性恋者

chic [ʃi:k]
n. elegance by virtue of being fashionable 高雅，雅致

interloper ['ɪntələʊpə]
n. someone who intrudes on the privacy or property of another without permission 闯入者，干涉他人事务者

mingle ['mɪŋgl]
vi. & *vt.* to bring or combine together or with something else 混合，混淆，交往

scribble ['skrɪbl]
vi. & *vt.* to write carelessly 潦草地书写，乱写，胡写

ethnographic [ˌeθnə'græfɪk]
adj. of or relating to ethnography 人种志的

booze [bu:z]
n. an alcoholic beverage that is distilled rather than fermented 酒，酒宴，暴饮

deploy [dɪ'plɔɪ]
vt. to distribute systematically or strategically 施展，有效地利用

infiltrate ['ɪnfɪltreɪt]
vt. to cause (a liquid) to enter by penetrating the interstices（使）渗透，（使）渗入，（使）潜入

adulterate [ə'dʌltəreɪt]
vt. to corrupt, debase, or make impure by adding a foreign or inferior substance（尤指

食物）掺假

iconography [ˌaɪkə'nɒgrəfɪ]

n. the images and symbolic representations that are traditionally associated with a person or a subject 图解，画像研究，（对一个人的）肖像研究

lubricate ['lu:brɪkeɪt]

vt. to make slippery or smooth through the application of a lubricant 加油润滑

hooch [hu:tʃ]

n. an illicitly distilled (and usually inferior) alcoholic liquor（非法酿造的或便宜的）酒

egalitarianism [ɪˌgælɪ'teərɪənɪzəm]

n. the doctrine of the equality of mankind and the desirability of political and economic and social equality 平均主义

bartender ['bɑ:tendə]

n. an employee who mixes and serves alcoholic drinks at a bar 酒吧间销售酒精饮料的人，酒吧间男招待

snob [snɒb]

n. a person regarded as arrogant and annoying 势利小人，附庸风雅之徒，假内行

cringe [krɪndʒ]

n. show submission or fear 畏缩，阿谀奉承

anecdote ['ænɪkdəʊt]

n. short account of an incident (especially a biographical one) 趣闻，轶事

self-deprecating [ˌself'deprɪkeɪtɪŋ]

adj. conscious of your own shortcomings 自贬的，谦虚的

elixir [ɪ'lɪksə]

n. hypothetical substance that the alchemists believed to be capable of changing base metals into gold 炼金药，长生不老药，酏剂

scrutiny ['skru:tənɪ]

n. the act of examining something closely 细看，细阅，仔细的观察

forsake [fə'seɪk]

vt. to give up something valued or enjoyed 放弃，舍弃

stricture ['strɪktʃə]

n. severe criticism 苛评，指责

titan ['taɪtən]

n. a person of exceptional importance and reputation 巨子，巨人，成就非凡的人

spreadsheet ['spredʃi:t]
n. a screen-oriented interactive program enabling a user to lay out financial data on the screen 电子制表软件，电子数据表

immersive [ɪ'mɜ:sɪv]
adj. tending to immerse 使人沉醉的，拟真的

intimacy ['ɪntɪməsɪ]
n. a feeling of being intimate and belonging together 亲密，亲近，亲昵的言行

pedigree ['pedɪgri:]
n. line of descent of a purebred animal 血统，家谱，血统表

Phrases and Expressions

succumb to 死亡，死于

Exercises

Questions 14—20

Answer the questions below. Choose ***NO MORE THAN THREE WORDS AND/OR A NUMBER*** *from the passage for each answer.*

14. What did Min Lieskovsky want to make use of while she was fed up with academia?

____

15. Why would those who don't care about the purity of a spirit bring it to a party according to Absolut?

____

16. What is the vision of those who mixed high-class spirits and hooch?

____

17. What attracts the hosts and partygoers with regard to the premium spirits?

____

18. Which discipline does the careful observation of everyday consumerism belong to?

____

19. What is the anthropologic focus of ReD's method that may unveil the subjects' life and feelings?

____

Questions 20—22

*Do the following statements agree with the information given in the passage? In brackets **20–22**, write*

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

20. (   ) ReD is at the forefront of a new trend in market research, treating the everyday lives of consumers as a subject worthy of social-science scrutiny.

21. (   ) The ethnographic method from anthropology is so helpful that companies have some ethnographers as their staffs.

22. (   ) Tech firms, such as Apple, tend to embrace ethnographic research to avoid the fantasy about consumers' desires.

Questions 23—26

Look at the following statements and the list of people below. Match each statement with the correct person.

*Write the correct letter, **A–C**, in blanks **23–26**.*

NB: You may use any letter more than once.

List of People	
A	Maxime Kouchnir
B	Leslie Perlow
C	Ken Anderson

23. Ethnographic research will expose the conflicts and complications of people's life through observation.

24. Technology firms may suffer from the pitfall of their assumption of consumers' interests and needs.

25. Ethnographic method have long been applied to understand the culture in corporate settings.

26. The human factor in market research may bring in a view of the dynamics in a society.

23. ____________ 24. ____________ 25. ____________ 26. ____________

Reading Passage 3

Give AP Credit Where Credit Is Due

A A few years ago, I chaired a group of high-school and college English teachers charged by the College Board with reviewing and revising the standards for its "AP English Literature and Composition" course, one of 34 Advanced Placement offerings for secondary-school students who want to take advanced classes.

B Ours was a deliberate, two-year process. For instance, we examined the results of a curriculum survey of college English departments that asked about the contents and skills taught in their first-year English-literature courses. If enough colleges regarded something as important—say, the ability to analyze metaphors in a poem—we incorporated it into the standards.

C Other fields do the same. Maureen A. McCarthy, a professor of psychology at Kennesaw State University, co-chairs the AP Psychology Development Committee, which uses a curriculum survey that includes questions about preferred textbooks in introductory college classes. For the test, she told me, "Each item is carefully analyzed to ensure that the content is representative of the curriculum, and we verify that the content is present in multiple texts."

D The responsibility of these committees is to align the AP curriculum with courses offered by departments at selective institutions. That's why it was a surprise when Dartmouth College decided recently to terminate its policy of giving credit to students who performed well on AP examinations in several subject areas.

E Yes, every year a few colleges make adjustments to their AP policies, and as AP enrollments have exploded (an annual growth rate of 9 percent for 20 years), people have wondered if the quality of courses has become inconsistent and whether they really qualify students to bypass first-year college offerings. The College Board has responded with procedures such as those I've noted, as well as with studies of the effect of taking AP courses on different student populations. All of that forms a continuing process of feedback and monitoring. The Dartmouth decision is noteworthy, however, because of its bluntness—and a finding by its psychology department. Widely reported in the news media, both have the potential to affect far more students than just those in Hanover, N.H.

F Dartmouth's existing policy accepts scores of 5 (the top) and sometimes 4 in 15 disciplines (although not for either AP English course, in literature or language). A Web page at the undergraduate dean's office summarizes the

common rationale for giving AP credit: "Dartmouth recognizes that some students complete college-level work before matriculating, and there is every desire to see that you do not repeat material that you have previously mastered and remain consistently challenged."

G Although Dartmouth will still allow students to "place out" of introductory courses, another Web page at the admissions office states bluntly how things have changed: "Beginning with the entering Class of 2018, Dartmouth will no longer grant course credit for AP or IB examinations." The International Baccalaureate is a prekindergarten-to-12th-grade curriculum that is offered at the high-school level by 777 schools in the United States.

H The first news announcement, an Associated Press story picked up by dozens of outlets, singled out the results of a psychology test as Exhibit A in the decision. They are, indeed, startling. The department of psychological and brain sciences administered a test based upon its "Introductory Psychology" course to students who had earned a 5 on the "AP Psychology" exam, a score the College Board terms "extremely well qualified." Over a three-year period, 208 students took the exam, and 188 of them failed! Hakan Tell, a classics scholar and chairman of the Committee on Instruction, pointed to the outcome as evidence that AP courses are not "equivalent to a college-level course."

I Critics responded swiftly. Trevor Packer, the College Board's senior vice president for AP, objected at the Teaching High School Psychology blog that the exam didn't account for "time and order effects"—material forgotten by test takers who had completed the AP course two years earlier, or the broad range of knowledge taught in AP courses but not tested by Dartmouth's exam. Jay Mathews, an education reporter at The Washington Post, noted a 2007 College Board study that followed students at 27 selective colleges, including Dartmouth, and determined that those who had scored 3 or higher on AP exams performed better at the next level than did students who had taken the colleges' own introductory courses.

J The chair of Dartmouth's department, Jay G. Hull, joined the debate at the high-school-psychology blog with an informative response. He stated upfront that the exam wasn't a "scientific study," nor was it intended to affect AP policies in other fields. He acknowledged, too, that Dartmouth's intro course uses "a high-level textbook," while most AP courses use "a general-level textbook," adding that the department leans toward a neuroscience approach that some AP courses don't emphasize.

K We may ask, then, whether the fail rate stems not from the inferior rigor of AP

but from different conceptions of introductory coursework.

L The debate over the study, however, missed the point. In spite of news-media reports, it had little influence on Dartmouth's decision.

M In an e-mail, Catherine Cramer, last year's chair of the instruction committee, stated that many members regarded the results of the study of psychology students as "dwarfed by the broader educational issue." Faculty members have debated AP credit at length before, she said, and some departments have disallowed it for years. The deciding factor was this: "The practice of encouraging our best-prepared students to have the least engagement with our high-level curriculum seemed to many of us to do them a serious disservice."

N Dartmouth is evidently fielding questions about its announcement because it has followed up with another news release from the dean of the faculty. It, too, now emphasizes faculty-student engagement: "Ultimately the decision to modify the policy was made to require our students to take full advantage of the faculty expertise and unique academic resources that characterize a Dartmouth educational experience."

O Anyone who has been on an academic committee knows how hard it is to understand why people vote the way they do. The reasons varied, no doubt, as did the intensities with which each person endorsed the "disservice" point, and we can only speculate, realizing that, at bottom, it's none of our business.

P We may ask, though, about the impact of refusing to give AP credit upon enrollments and test scores in high-school AP courses—or other advanced offerings. What's the incentive for 16-year-olds to take a course with a stiffer workload, competitive fellow students, and the chance of a lower grade?

Q College credit means savings in time and money once they matriculate. Take it away, and students may wonder about the advantages. Yes, AP courses accustom them to college-level labor, and admissions offices favor AP as a sign that an applicant seeks a school's best resources (this is Dartmouth's policy). But those are somewhat fuzzy promises to a high-school junior.

R Given the high remediation and dropout rates among first-year students at American colleges, along with disappointing scores on 12th-grade exams across disciplines given by the National Assessment of Educational Progress, we should encourage more AP enrollment, not less.

S The College Board feels pressure to bring AP to underserved minority and low-income students as a matter of equity, and those groups especially need more

college-readiness training.

T For all students, AP not only immerses them more deeply in a subject, but it marks an experiential change, explicitly pointing them toward college and raising academics to a new level of seriousness too often absent from their social lives. The Dartmouth faculty may be right to eliminate AP credit to set its own standards for first-year courses. But one hopes that other colleges will consider the impact at the secondary level before taking the same step.

(Adapted from http://chronicle.com/article/Give-AP-Credit-Where-Credit-Is/137543/, written by Mark Bauerlein)

Notes

- **International Baccalaureate**（IBO）国际文凭组织，该组织的教育宗旨是终身教育（Education for Life），它倡导国际主义和对不同文化的理解与尊重，致力于培养酷爱探究、知识渊博、有人道主义精神的青年。
- **The Associated Press** 美国联合通讯社，1892 年成立于芝加哥，由纽约《太阳报》等 6 家报社创建。

New Words

metaphor ['metəfə]
n. a figure of speech in which an expression is used to refer to something that it does not literally denote in order to suggest a similarity 隐喻，暗喻，象征

rigor ['rɪgə]
n. excessive sternness 严格，严酷，严密

dwarf [dwɔ:f]
vt. to make appear small by comparison（使）显得矮小，使（发育，智能等）受阻碍，使相形见绌

faculty ['fæklti]
n. all the teaching staff at a university, college, school, etc. 全体教职员工

disservice [dɪs'sɜ:vɪs]
n. an act intended to help that turns out badly 伤害，虐待，不亲切的行为

endorse [in'dɔ:s]
vt. to sign as evidence of legal transfer 签名，签署，支持，核准

matriculate [mə'trɪkjuleɪt]
vt. to enroll as a student 录取（学生）入大学

fuzzy ['fʌzɪ]
adj. indistinct or hazy in outline 模糊的，含糊不清的

Phrases and Expressions

single out 挑选，抉择

miss the point 不得要领，未抓住要点，未切中要害

accustom to （使）习惯

Exercises

Questions 27—31

*Choose the correct letter **A**, **B**, **C** or **D**. Write the correct letter in blanks **27–31**.*

27. Which of the following statements about the committees working at reviewing and revising course standards is not mentioned?
    A The committees improve a AP curriculum to match it with some course in college.
    B Both high-school and college English teachers are involved in the committees.
    C High school teachers and students answer survey questions to inform the instruction committees.
    D They decide on the contents covered in a course based on curriculum survey results.

28. Which of the following statements about the Advanced Placement offerings is not true?
    A Colleges have different policies for candidates' AP courses and scores.
    B People have thrown some doubts about the quality of the courses.
    C The College Board has always dismissed doubts from the general public.
    D They have been steadily acquiring popularity during last two decades.

29. The reactions to Dartmouth decisions from various aspects doesn't include ____________.
    A surprise
    B criticism
    C startle
    D approval

30. Criticism against the conclusion that AP courses are not "equivalent to a college-level course" includes ____________.
    A test takers have forgotten knowledge about AP courses taken years ago
    B students performing well in AP tests scored better than those without AP scores
    C 208 students from one college doesn't make a sound subject for a study supporting a policy.

D the exam does cover the knowledge incorporated by AP courses

31. Attitudes towards AP courses vary, among which ________ is not mentioned in the passage.

A With AP modules, the best-prepared students can get engaged with high-level courses in college.

B Disapproval of high-school AP courses and other high-level offerings by colleges have serious impact on students' learning practice.

C More AP enrollments should be encouraged given the poor performance of freshmen at American colleges and high-school students.

D AP can direct students toward college and raise their academic awareness to a new level, and this makes an experiential change.

27. ________ 28. ________ 29. ________ 30. ________ 31. ________

Questions 32—40

Complete the summary below. Choose ***NO MORE THAN TWO WORDS*** *from the passage.*

The Dartmouth Decision and Responses

The Dartmouth abrupt decision is 32__________ that it announced recently to 33__________ its policy of accepting good performance in AP examinations in some 34__________. Also, a finding by its psychology department surprised people by its 35__________. It will not 36__________ course credit for IB examinations since 2018, either, a curriculum offered by 777 schools in the US. The results of a 37__________test as Exhibit A is referred to as support for the decision, conducted over 208 students in Dartmouth College. This provoked many scholars and instructors to join in a blog 38__________. The chair of Dartmouth's department's response is 39__________ that the textbooks used by Dartmouth and most AP courses are at different 40__________ along with an approach seldom applied in the field.